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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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JANUARY, 1973
VOLUME 70, NUMBER 1

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115th MSMA Annual Session
March 29-April 1, 1973 St. Louis

Everybody experiences psychic tension.

Most people can handle this tension.

Some people develop excessive psychic tension and need your counselin

and a few may need counseling
and the psychotropic action of Valium® (diazepam).

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Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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All material other than scientific should be received prior to the first of the month preceding month of publication.

Please give notice of change of address at least one month in advance of the change, giving old and new addresses.

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urinalysis, etc.) before prescribing and at fre-
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ng those responsive to routine measures, contra-
ted patients or those who cannot be observed fre-
ly. Warn patients not to exceed recommended
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est possible dosage is the goal of therapy. Dosage
d be taken with meals or a full glass of milk. Sub-
e alka capsules for tablets if dyspeptic symptoms
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diately any sign of: fever, sore throat, oral lesions
ptoms of blood dyscrasia); dyspepsia, epigastric
symptoms of anemia, black or tarry stools or other
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ns, significant weight gain or edema. A one-week
eriod is adequate. Discontinue in the absence of a
able response. Restrict treatment periods to one
in patients over sixty.
ations: Acute gouty arthritis, rheumatoid arthritis,
natoid spondylitis.
raindications: Children 14 years or less; senile pa-
; history or symptoms of G.I. inflammation or ul-
ion including severe, recurrent or persistent dys-
a; history or presence of drug allergy; blood
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nsion; thyroid disease; systemic edema;
atitis and salivary gland enlargement due to the
polymyalgia rheumatica and temporal arteritis;
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ts, or long-term anticoagulant therapy.
ings: Age, weight, dosage, duration of therapy, ex-
ce of concomitant diseases, and concurrent potent
otherapy affect incidence of toxic reactions. Care-
nstruct and observe the individual patient, espe-
the aging (forty years and over) who have
ased susceptibility to the toxicity of the drug. Use
st effective dosage. Weigh initially unpredictable
fits against potential risk of severe, even fatal, re-
ns. The disease condition itself is unaltered by the
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n nursing mothers. Drug may appear in cord blood
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including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.

Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.

Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia, ulcerative stomatitis, salivary gland enlargement. (B)98-146-070-G

Serious side effects do occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings, contraindications and adverse reactions.

For complete details, including dosage, please see full prescribing information.

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MSMA NEWS ROUND-UP

January, 1973

PA Conference to offer 'one-stop information center'

"One-stop shopping centers" have made a big hit on the consumer scene. Now, in effect, members of the Missouri State Medical Association are being offered a "one-stop information center" — the annual Public Affairs Conference.

Scheduled Feb. 3-4, 1973, at the Ramada Inn in Jefferson City, the Conference will offer MSMA members an opportunity to find out what is going on affecting medicine in the areas of state and national legislation, the AMA, the MSMA, foundations and MMPAC. All of this at one meeting!

Also, plenty of time has been allotted for question, answers and discussion so that MSMA members can express their own opinions on matters of concern.

(See complete Conference program on Page 7)

The Woman's Auxiliary to the MSMA has scheduled its Winter Board Meeting to coincide with the Conference so physicians and their wives will have the opportunity to attend sessions of the Conference. The Auxiliary Board will meet from 10:00 a.m. to noon, Saturday, Feb. 3, at the Ramada Inn.

Hubert A. Ritter, M.D., St. Louis, Conference Chairman, says Walter T. Gunn, M.D., St. Louis, President of the MSMA, will welcome participants. Following the welcome, a panel composed of Charles P. McGinty, M.D., Cape Girardeau; E. J. Cunningham, M.D., St. Louis; Tom McMurry, M.D., Resident at the University of Missouri Medical Center; and Mr. William F. Strech, Senior Medical Student at M.U., will discuss "What Should Organized Medicine Do to Better Serve the Profession?"

Two Missouri legislators, Rep. Richard Rabbitt, D-St. Louis, Speaker of the House, and Sen. Lem Jones, R-Kansas City, will talk on issues before the General Assembly. John I. Matthews, M.D., Jefferson City, will present the MSMA outlook on state legislation.

Howard L. Cook, Jr., Washington, D. C., Assistant Director of the AMA Department of Congressional Relations, will outline bills affecting medicine currently before Congress. David B. Weihaupt, Chicago, Director of the AMA Department of Planning and Development, will explain what the AMA offers members and field questions concerning the AMA.

MMPAC had another good record in the recent election. Kenneth C. Hollweg, M.D., Kansas City, Chairman of MMPAC, will discuss the Committee and how it works.

Clement B. Grebel, M.D., St. Louis, Chairman of the Health Care Foundation of Missouri, will bring Conference participants up to date on the Foundation.

MSMA members can register for the PA Conference by clipping the attached card and mailing it to the Missouri State Medical Association, Box 1028, Jefferson City, Missouri 65101.

Room reservations should be made directly with the Ramada Inn, Jefferson City, Mo. 65101.

Public Affairs Conference

February 3-4, 1973

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Jefferson City, Mo. 65101

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FDA plans curb on anti-obesity drugs, vitamins

The Food and Drug Administration recently disclosed plans to curb the prescribing of anti-obesity drugs and also proposed limits on vitamin A and vitamin D capsules.

The agency said studies show that anti-obesity drugs are seldom effective for average users and hazardous for some. Drug bulletins will be mailed to physicians and manufacturers will be ordered to revise the labelling of the medicines.

The FDA will seek to have the great majority of appetite-suppressants — those containing an amphetamine type of chemical — regulated under the Controlled Substances Act. That would provide degrees of control ranging from tight record-keeping requirements on physicians and pharmacists to production quotas on manufacturers.

Concerning vitamins, the FDA proposed limits on capsules are 10,000 international units of vitamin A and 400 of vitamin D. Those amounts have for some time been the "recommended daily allowance."

The FDA proposal gives interested parties 60 days for comment, after which the agency will issue firm regulations. Physicians, of course, could prescribe higher amounts of the vitamins for treatment of specific diseases.

W.F. Franca, M.D., former President of MSMA, dies

Wenceslaus F. Francka, M.D., of Hannibal, a surgeon and former President of the Missouri State Medical Association, died Dec. 2 at St. Mary's Health Center, Richmond Heights. Services and burial were in Hannibal.

Dr. Francka was President of the MSMA in 1957. He was also a former trustee of the St. Louis Blue Shield Plan.

Dr. Francka practiced in Hannibal after being graduated from the St. Louis University School of Medicine in 1924 until his retirement in 1959.

Survivors include his wife, Mrs. Margaret Scheer Francka of Hannibal, and two daughters, Mrs. Jerry E. Ritter, St. Louis, and Mrs. Jane Mosley, Hannibal.

Dr. Klippel appointed

Allen P. Klippel, M.D., was recently named the first Director of Emergency Medical Services for St. Louis.

Dr. Klippel, who is Chairman of the MSMA Ad Hoc Committee on Emergency Medical Services, will assume the office Jan. 1, 1973.

News Briefs

Dr. Wilson resigns from HEW

Vernon E. Wilson, M.D., recently announced he is resigning as head of the Government Health Services and Mental Health Administration of HEW to return to the University of Missouri.

Dr. Wilson was Dean and Director of the University of Missouri Medical Center-Columbia from 1959 to 1967 and served as Vice President of Academic Affairs for the University from 1968 to 1970. He also serves on the AMA Council on Medical Education.

His position at the University will be announced at a later date.

Fire destroys Osceola clinic

D. H. Giesler, M.D., and J. H. Thies, M.D., are preparing to move into a temporary clinic facility at Osceola after fire destroyed their Tri-County Clinic in late November.

Dr. Giesler said a double-wide trailer will be used for the clinic until a permanent structure is built near the Sac-Osage Hospital.

The blaze, which broke out only moments after the clinic closed, did an estimated $150,000 damage. Dr. Giesler said many medical records in the files were damaged but salvaged while others were destroyed.

Dr. Ulett is appointed

George A. Ulett, M.D., former director of the Missouri Division of Mental Health, was recently appointed chairman of psychiatry at the Missouri Institute of Psychiatry in St. Louis. The appointment was made by the University of Missouri Board of Curators.

Mental health directory ready

A resource directory listing Missouri's Public Mental Health and Mental Retardation Services has recently been published and is available free to physicians.

The directory gives the name and location of the clinics, the telephone number, the area the clinic serves and the hours the clinic is open.

Richard B. Cravens, Ph.D., Director of the Community Mental Health Program, said the agency has also compiled a catalog of films and pamphlets available to physicians.

Both the directory and the catalog can be obtained free by writing to Richard B. Cravens, Missouri Division of Mental Health, 722 Jefferson St., Jefferson City, Mo. 65101.

MSMA Council votes to distribute publication as communications aid

In an effort to improve communications between the AMA and members of the Missouri State Medical Association, the MSMA Council voted Dec. 9 to distribute copies of the weekly AMA Newsletter to hospitals throughout the state.

The Newsletter, which usually is mailed only to state association officers, is a four-page condensed publication offering news items affecting medicine. The Councilors agreed to obtain the name of a person in each hospital in the state who will be responsible for receiving and posting the Newsletter.

The project is expected to begin with the first edition of the Newsletter in January and continue on a trial basis until the Annual Session, March 29 to April 1. The project will then be assessed for effectiveness. Councilors expressed the hope that posting the Newsletter on hospital bulletin boards would provide more physicians with access to pertinent medical information.

In other action taken at the Dec. 9-10 meeting in Jefferson City, the Council:

Otolaryngology

* Accepted a request from the Missouri Ear, Nose and Throat Association, Inc., for representation on the MSMA Commission on Interspecialty Medicine.

* Approved a 1973 budget for the MSMA of $353,757, an increase of about 5 per cent over the 1972 budget.

* Appointed an Ad Hoc Committee to study the feasibility of inserting a year of primary care training in medical school curriculum.

New Headquarters Building

* Okayed the Building Committee's recommendation for funds to remodel the newly purchased building which will become Headquarters for the MSMA. Remodeling work on the building began on Dec. 14 with a projected completion date set in late spring.

* Approved in principle the efforts of the Ad Hoc Committee on Emergency Medical Services and encouraged further development of a coordinated program for these services in Missouri and also provide for regionalization of ambulances.

* Accepted recommendations of the Committee on Planning which call for (1) tabling House of Delegates Resolution No. 27 dealing with the Council Chairmanship; (2) a study to be made of the problem that strict adherence to tradition constitutes a continuing deterrent to the sustained involvement of competent and interested members of the Association; (3) advising the Communications Committee that two ways to improve communications could be to advocate short personal letters from Councilors to their District members and to maintain closer liaison with hospital staffs; (4) a legal clarification of the Council status of Immediate Past President; (5) the Health Care Foundation of Missouri to study the possibility of developing a certified hospital admission program; and (6) the Council to study feasibility of retaining management consultants to recommend possible income-producing programs for the MSMA.

New MSMA Headquarters

The Council approved funds and remodeling work began last week on the new MSMA Headquarters Building, 113 Madison St., in Jefferson City. The historic structure is located directly across the street from the Missouri Governor's Mansion and is two blocks from the State Capitol. Contractors estimate the building will be ready for occupancy in late spring of 1973.

(Please See Next Page)

Council

(Continued from Preceding Page)

* Approved a Commission on Public Affairs report which asked for endorsement for new guidelines for mobile X-ray unit chest screening as issued by the Tuberculosis and Respiratory Disease Society of St. Louis and Eastern Missouri. The TB Society has discontinued mass screening, but will continue to offer the service in problem situations such as long term care facilities and high incidence areas.

* Heard a report from the Insurance Advisory Study Committee and approved the existing group insurance programs offered by the MSMA. The Council also okayed a recommendation seeking further study in three additional insurance areas (1) term life; (2) overhead; and (3) excess major medical.

* Approved a report from the Ad Hoc Committee on Continuing Medical Education which recommends summer employment of medical students in physicians' offices and calls for the CME Committee to form a panel to study the EKG computer interpretation problem. The CME Committee plans a workshop Feb. 2-3, 1973, in Jefferson City, in conjunction with the MSMA Council and the Public Affairs Conference.

Video Tape Depositions

* Heard a report of the Joint Meeting of Medical-Legal Committees calling for a study of the use of video tape depositions from physicians for courtroom use. Also, the Council approved a recommendation that the use of pretrial screening panels for professional liability suits be re-studied.

* Approved the report of the Ad Hoc Committee on Third Party Payments and discussed a meeting that will be held in January with representatives of the Committee and of Aetna Insurance Co. The meeting will cover Aetna's prevailing fee program.

* Endorsed a Project Proposal of the Health Care Foundation of Missouri to the Missouri Regional Medical Program which seeks funding for HCFM from MoRMP for a three-year period.

Some physicians fees may be increased within freeze guidelines

Physicians who haven't increased fees since Jan. 1, 1971, may be eligible to raise them by a cumulative 5 per cent, effective Jan. 1, 1973.

Physicians are permitted to increase fees 2.5 per cent annually without seeking prior approval by the IRS, but must be prepared to justify the increase. Only higher costs incurred since Jan. 1, 1971, or since fees were last raised, whichever is later, may be passed on in the form of higher fees. Guidelines do not allow MDs to pass on increased costs that occurred prior to Jan. 1, 1971.

Physicians will not be permitted to increase fees if the additional income would raise their profit margin above the base period. Base period profit margin is defined as any two of a physician's past three fiscal years ending before Aug. 15, 1971. Profit margin is defined as the ratio of net profit, before taxes, to total revenue.

Those physicians who feel they have suffered gross inequity or serious hardship may apply for exception to the regulations by obtaining forms S-16 and S-53 from the IRS district director.

AMA members desiring assistance may call AMA's special telephone service for interpretation of Economic Stabilization Program regulations. Call (312) 527-1571, Ext. 434, and ask for Norbert Budde.

Are claims practice of commercial carriers causing you problems?

Are the practices of commercial insurance carriers presenting problems for physicians in Missouri?

This question will be taken up Jan. 11, 1973, in Jefferson City when the MSMA Commission on Medical Economics and Third Party Medicine meet with carrier representatives.

The Commission has requested MSMA members who have experienced objectionable procedures by commercial carriers to inform MSMA Headquarters, Box 1028, Jefferson City, Mo., 65101, before the Jan. 11 meeting. It would be helpful if physicians would send supportive material listing specific instances of objectionable commercial carrier claims practices.

The meeting is to assess the present situation in Missouri in regard to an AMA resolution passed at the 1972 Annual Session. The resolution calls on third parties to consult with medicine before attempting to develop and administer contracts relating to "usual, customary, and reasonable fees," emphasized the essential need for third parties to rely upon existing peer review mechanisms and made clear the unalterable opposition of the medical profession to action on the part of any third party that would encourage or promulgate litigation in the settlement of fee disputes.

Legislation Affects You!!

All MSMA Members Are Invited to Attend the MSMA 1973

Public Affairs Conference

AND

WOMAN'S AUXILIARY BOARD MEETING

February 3-4, 1973 **Ramada Inn, Jefferson City**

Legislation, both state and federal, is having more and more affect on YOU and YOUR practice. Keep abreast of the current legislative scene by attending the 1973 Public Affairs Conference.

The Conference is designed to inform Missouri physicians about the problems and issues which medicine faces today. There will be ample time for input with officials of the MSMA, AMA and legislators.

SATURDAY, FEBRUARY 3, 1973

1:00-2:00 PM Registration

2:00 PM Welcome
Walter T. Gunn, M.D.
St. Louis, President, MSMA

2:15 PM **Panel: "What Should Organized Medicine Do to Better Serve the Profession?"**
Mr. William F. Strech, Columbia, Senior Medical Student at M.U.
Tom McMurry, M.D., Columbia, Resident Missouri University Medical Center
E. J. Cunningham, M.D., St. Louis, Practicing Physician
Charles P. McGinty, M.D., Cape Girardeau, Practicing Physician
Moderator: Hubert A. Ritter, M.D., St. Louis

3:15 PM Coffee Break

3:30 PM **Legislators' Report**
Rep. Richard Rabbitt, D-St. Louis
Sen. Lem Jones, R-Kansas City

4:30 PM **"What Does AMA Do for You?"**
David B. Weihaupt
Director, AMA Department of Planning and Development

5:00 PM **Questions and Answers**
Featuring all afternoon session program participants at social hour

6:30 PM Banquet
Speaker—
Howard L. Cook, Jr.
Assistant Director, AMA Department of Congressional Relations

SUNDAY, FEBRUARY 4, 1973

7:30-9:00 AM Buffet Breakfast

9:00 AM **Auxiliary Activities**
Mrs. Keith Jones
Warrensburg
President, Woman's Auxiliary to MSMA

9:30 AM **MSMA Outlook on Legislation**
John I. Matthews, M.D.
Jefferson City
Chairman, MSMA Legislative Affairs Committee

10:00 AM **Health Care Foundation of Missouri**
Clement B. Grebel, M.D.
St. Louis
Chairman, Central Coordinating Committee
Health Care Foundation of Missouri

10:30 AM **MMPAC—Does It Work?**
Kenneth C. Hollweg, M.D.
Kansas City
Chairman, Missouri Political Action Committee

11:00 AM **Questions and Answers**
Featuring all morning session program participants

(A Registration Form Is on the Yellow Sheet of this JOURNAL*)*

MAKE YOUR ADVANCE ROOM RESERVATIONS AT THE RAMADA INN, JEFFERSON CITY, MO. 65101

Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole. **Warnings:** If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established. **Precautions:** Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored. **Adverse Reactions:** Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopeni malodor of the urine, crystalluria, hematuria; appearance of liv Ascaris in the mouth and nose. Hypersensitivity reactions

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lude: fever, facial flush, chills, conjunctival injection, ioedema, anaphylaxis, skin rashes, erythema multiforme luding Stevens-Johnson syndrome), and lymphadenopathy. **plied:** Chewable tablets, containing 500 mg thiabendazole, oxes of 36, strip packaged, individually foil wrapped; spension, containing 500 mg thiabendazole per 5 cc, in tles of 120 cc.

more detailed information, consult your MSD representa- or see full prescribing information. Merck Sharp & hme, Division of Merck & Co., Inc., West Point, Pa. 19486

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addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.

The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).

MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.

The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

Preliminary Program
115th Annual Session

MISSOURI STATE MEDICAL ASSOCIATION

Chase-Park Plaza Hotel, St. Louis **March 29-April 1, 1973**

Thursday, March 29

11:00 AM Registration of Delegates.
1:30 PM House of Delegates Meeting, opening session.
3:30 PM Reference Committee Meetings.

Friday, March 30

8:00 AM Registration.
9:00 AM General Session.
 Introduction: Walter T. Gunn, M.D., St. Louis, MSMA President.
 Speaker: Representative James W. Symington, Washington, D. C.
10:30 AM Intermission to view exhibits.
10:30 AM *Clinical Allergy—Diagnosis and Treatment.*
 Presiding: William T. K. Bryan, M.D., St. Louis, President, Missouri State Allergy Association.
 Participants:
 Welcome and Introduction, William T. K. Bryan, M.D.
 Diagnostic Tests in Allergic Disease, Raymond G. Slavin, M.D., Associate Professor of Internal Medicine and Chief, Section of Allergy and Immunology, St. Louis University School of Medicine, St. Louis.
 Hyposensitization, Ralph Hale, M.D., Department of Medicine, Wesley Medical Center and St. Joseph Hospital, Wichita, Kan.
 Food Allergy in Alcoholics, George A. Ulett, M.D., Professor and Chief, Department of Psychiatry, University of Missouri School of Medicine, St. Louis.
 Sponsored by Missouri State Allergy Association.
*11:00 AM *Newer Techniques in the Diagnosis and Treatment of Thyroid Disease.*
 Moderator: Thomas F. Frawley, M.D., St. Louis.
 Panel Participants:
 John Lindeman, M.D., St. Louis.
 Garrett Hagen, M.D., St. Louis.
 Lewis Chase, M.D., St. Louis.
 Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.
*11:00 AM *Newer Aids in the Diagnosis of Connective Tissue Disease*, John D. Arnold, M.D., Kansas City.
 Newer Treatments in Connective Tissue Disease, Jack Zuckner, M.D., St. Louis.
 Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.
*11:00 AM *Developmental Dyslexia and a Rational Approach to Management,* Norman E. Silberberg, Ph.D., Director of Research and Program Development, Kenny Rehabilitation Institute, Minneapolis, Minn.
 Moderator: Warren A. Weinberg, M.D., St. Louis.
 Panel Discussants:
 Philip R. Dodge, M.D., Professor and Chairman, Department of Pediatrics and Professor of Neurology, Washington University School of Medicine, St. Louis.
 Richard Burnett, Ed.D., Professor of Education and Director of the Reading Clinic, University of Missouri-St. Louis.
 Warren A. Weinberg, M.D., Assistant Professor, Department of Pediatrics and Neurology, Washington University School of Medicine, St. Louis.
 Manic-Depressive Illness in Children: Recognition and Treatment, Warren A. Weinberg, M.D., St. Louis.
 Sponsored by Missouri Chapter, American Academy of Pediatrics.

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* Concurrent Sessions.

*11:00 AM *Psychiatric Sequelae of Vasectomy.*
Moderator: Ralph L. Biddy, M.D., St. Louis.
Panel Participants:
I. M. Thompson, M.D., Professor and Chief, Department of Urology, University of Missouri, Columbia.
Gilbert Ross, Jr., M.D., Department of Urology, University of Missouri, Columbia.
(Additional panelists to be announced.)
Sponsored by Missouri Psychiatric Association and Missouri Academy of Psychiatry.

*11:00 AM *Program on Surgery,* Sponsored by Missouri State Surgical Society.

12:30 PM Missouri University Alumni Luncheon.
Youth and School Committee, Missouri Chapter, American Academy of Pediatrics Luncheon. (Open to all physicians.)
Missouri Academy of Psychiatry Luncheon.

* 2:00 PM *Clinical Allergy—Diagnosis and Treatment* (Continued).
Presiding: Orval R. Withers, M.D., Clinical Professor of Medicine Emeritus, University of Kansas School of Medicine, Kansas City, Kan.
Participants:
37 Years of ENT Allergy, George E. Shambaugh, Jr., M.D., Emeritus Professor of Otolaryngology, Northwestern University School of Medicine, Chicago, Ill.
Allergic Middle Ear Disease, Jack D. Clemis, M.D., Associate Professor of Otolaryngology, Northwestern University School of Medicine, Chicago, Ill.
The Effect of Allergy on the Nervous System, Frederic Speer, M.D., Director, Pediatric Allergy, University of Kansas Medical Center, Kansas City, Kan.
Adrenergic Theory of Bronchial Asthma, Charles W. Parker, M.D., Professor of Medicine, Division of Immunology, Washington University School of Medicine, St. Louis.
Panel—Entire Faculty—Allergy—Questions and Answers.
Moderator: James W. Willoughby, M.D., Lecturer in Medicine, University of Missouri-Kansas City School of Medicine.
Sponsored by Missouri State Allergy Association.

* 2:00 PM *The Management of Chronic Renal Failure.*
Moderator: John Maher, M.D., Columbia.
Panel Participants:
Robert Cuddihee, M.D., St. Louis.
Herbert Lubowitz, M.D., St. Louis.
Thomas T. Crouch, M.D., Kansas City.
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.

* 2:00 PM *Hypoglycemic Agents Revisited,* Marvin E. Levin, M.D., St. Louis.
(Additional program to be announced.)
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.

* 2:00 PM *Abdominal Pain and Multiple Surgery—A Psychosomatic Condition?*
Moderator: Ralph L. Biddy, M.D., St. Louis.
Panel Participants:
David Davis, M.D., Professor of Psychiatry and Associate Chairman, Department of Psychiatry, University of Missouri School of Medicine, Columbia.
Richard T. Quick, M.D., Assistant Professor of Psychiatry, St. Louis University, St. Louis.
Richard L. Sterkel, M.D., Gastroenterologist, St. Louis.
W. E. Bazzoui, M.D., Clinical Director, Mid-Missouri Mental Health Center, Columbia.
Sponsored by Missouri Psychiatric Association and Missouri Academy of Psychiatry.

* 2:00 PM Program on Surgery Sponsored by Missouri State Surgical Society.
3:30 PM Intermission to view exhibits.
4:00 PM **House of Delegates,** second session.
5:30 PM Missouri State Medical Foundation Annual Meeting.
6:00 PM Reference Committee Meetings.
6:00 PM Dinner Meeting: Missouri State Allergy Association.
6:30 PM Dinner Meetings:
Missouri Psychiatric Association and Missouri Academy of Psychiatry.
Missouri State Surgical Society—University Club.
8:00 AM Registration.

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* Concurrent Sessions.

Saturday, March 31

*9:00 AM *Whither Medicine.*
Moderator: Maxwell G. Berry, M.D., Kansas City.
Participants:
Assurance of Quality by Knowledge and Performance or—How Else?, Edward C. Rosenow, Jr., M.D., Executive Vice-President, American College of Physicians, Philadelphia, Pa.
Dynamic Reform in Graduate Education and Credentialing, Robert A. Chase, M.D., Chairman, Graduate Education Committee, American College of Surgeons and Emile Holman Professor of Surgery and Chairman, Department of Surgery, Stanford University School of Medicine, Stanford, Calif.
The New Economics of Health Care, William B. Hildebrand, M.D., Chairman, Council on Medical Services, American Medical Association, Menasha, Wis.

*9:00 AM *Postoperative Respiratory Care*, Henrik Bendixen, M.D., Professor and Chairman, Department of Anesthesia, University of California, San Diego, Calif.
Moderator: Robert W. Vaughan, M.D., St. Louis.
Sponsored by Missouri Society of Anesthesiologists.

10:30 AM Intermission to view exhibits.

10:30 AM *Health Care Team Concept—Spinal Cord Injury System.*
Moderator: Saul Boyarsky, M.D., St. Louis.
Participants:
Franz U. Steinberg, M.D., Chief of Physical Medicine and Rehabilitation, Jewish Hospital and Assistant Professor of Medicine, Washington University School of Medicine, St. Louis.
Simon Horenstein, M.D., Professor and Chairman, Department of Neurology, St. Louis University School of Medicine, St. Louis.
Henry G. Schwartz, M.D., Professor and Head, Division of Neurosurgery, Washington University School of Medicine, St. Louis.
Saul Boyarsky, M.D., Professor and Head of Division of Urological Surgery, Washington University School of Medicine.
(With invited discussants)

*11:00 AM *Medicine, Surgery, Anesthesia and Hepatitis*, David M. Little, Jr., M.D., Staff Anesthesiologist, Hartford Hospital, Hartford, Conn.
Moderator: Robert W. Vaughan, M.D., St. Louis.
Sponsored by Missouri Society of Anesthesiologists.

*11:00 AM *Symposium on Chemotherapy.*
Moderator: Andrew McCanse, M.D., Kansas City.
Participants:
Joel L. Zeffren, M.D., St. Louis.
Virgil Loeb, Jr., M.D., St. Louis.
Reginald P. Pugh, M.D., Columbia.
Sponsored by Missouri Division, American Cancer Society.

*11:00 AM *Newer Approaches to the Management of Coronary Artery Disease.*
Moderator: G. Charles Oliver, M.D., St. Louis.
(Panel participants to be announced.)
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.

*11:00 AM *The Problem of Diabetic Retinopathy*, Francis A. L'Esperance, M.D., Assistant Professor of Clinical Ophthalmology, Columbia University College of Physicians and Surgeons and Director of John A. Hartford Laser Laboratory, New York, N. Y.
Moderator: Anwar Shah, M.D., St. Louis
Panel Discussants:
Isaac Boniuk, M.D., St. Louis.
King Y. Lee, M.D., Kansas City.
Anwar Shah, M.D., St. Louis.
Sponsored by the Missouri Ophthalmological Society, Inc.

12:30 PM **MSMA General Luncheon.**
Guest Speaker—James H. Sammons, M.D., Vice Chairman, Board of Trustees, American Medical Association, Baytown, Tex.
Fifty-Year Club Luncheon.
Missouri Ophthalmological Society, Inc., Luncheon.
Missouri State Society of Neurological Surgeons Luncheon.
Physiatrists Luncheon.

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* Concurrent Sessions.

1:30 PM *Diagnostic Radiology in Obstetrics and Gynecology,* Lawrence A. Pilla, M.D., Assistant Clinical Professor of Radiology, St. Louis University, St. Louis. (This program is of general interest.)
Moderator: William H. McAlister, M.D., St. Louis.
Sponsored by Missouri Radiological Society.

* 2:30 PM *Program on Dermatology,* Sponsored by Missouri Dermatological Society, Inc.

* 2:30 PM *Cerebrovascular Disease and the Management of the Post-Phlebitic Extremity.*
Moderator: Albert M. Estes, M.D., Cape Girardeau.
Participants:
Pathogenesis and Diagnosis of Cerebral Ischemia, William S. Fields, M.D., Professor of Neurology, University of Texas Medical School, Houston, Tex.
Surgical Management of Cerebrovascular Insufficiency, Jesse E. Thompson, M.D., Clinical Professor of Surgery, University of Texas Southwestern Medical School, Dallas, Tex.
The Management of the Post-Phlebitic Extremity, Charles R. Doyle, M.D., Professor of Clinical Surgery, St. Louis University School of Medicine, St. Louis.
Sponsored by Missouri Heart Association, Inc.

* 2:30 PM *Program on Surgery,* Sponsored by Missouri State Surgical Society.

3:00 PM *Radiology of Total Hip Replacement,* Tom W. Staple, M.D., Associate Professor of Radiology, Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis.
A Roentgen Approach to GI Obstruction in Children, Gary D. Shackelford, M.D., Instructor in Radiology, Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis.
Necrotizing Enterocolitis, John C. Leonidas, M.D., Kansas City.
Moderator: William H. McAlister, M.D., St. Louis.
Sponsored by Missouri Radiological Society.

4:00 PM Intermission to view exhibits.
5:00 PM St. Louis University Medical Alumni Cocktail Party.
5:00 PM Washington University Medical Alumni Cocktail Party.
6:00 PM Missouri Dermatological Society, Inc., Cocktails and Dinner.
6:30 PM Social Hour for those Attending Banquet.
7:15 PM Annual Banquet in Honor of Past-Presidents.

Sunday, April 1

7:30 AM House of Delegates, breakfast and final session.

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* Concurrent Sessions.

Have You Made Your Reservations?

MISSOURI STATE MEDICAL ASSOCIATION

115th ANNUAL SESSION

March 29-April 1, 1973 Chase-Park Plaza Hotel, St. Louis

AMA President Carl A. Hoffman *(left)* visits the Missouri Delegation in the Missouri Room. He is shown here with Dr. Stanley S. Peterson of Springfield, Delegate to the AMA.

MSMA Tenth District Councilor Eugene T. Hansbrough of Poplar Bluff *(left)* and MSMA Executive Secretary Raymond McIntyre, Jefferson City, discuss a matter of importance.

PSRO Is Major Issue at Clinical Convention; AMA to Take Dominant Leadership Role

The AMA will "provide a dominant role of leadership in the implementation of the PSRO program to assure that the best interests of the public and profession are preserved," the AMA House of Delegates decreed in acting on the major issue at the 1972 Clinical Convention.

This will be done by creating an advisory Committee on Professional Standards Review to help provide input from the medical profession in development of PSRO regulations and to help constituent societies set up PSROs, among other things.

On other matters, AMA President Carl A. Hoffman offered bold suggestions on solving the problems of catastrophic illness insurance coverage for Americans and the maldistribution of physicians. Delegates at the 1972 meeting gave their approval to budget restraint measures within the AMA.

During the Clinical Session in Cincinnati on November 26-29, the House of Delegates met for a total of eight hours and 55 minutes and acted upon 59 reports and 65 resolutions, the greatest total number of measures presented at a clinical meeting in several years.

More than 2,000 physicians attended the convention and included a delegation from Missouri. MSMA's four delegates, four alternates, Association officers and members were in attendance. Delegates are Arthur W. Neilson, St. Louis; Hector W. Benoit, Jr., Kansas City; Stanley S. Peterson, Springfield; and J. Loren Washburn, Versailles. Alternates are James C. Sisk, St. Louis County; Robert W. Kelley, St. Louis; Rae W. Froelich, Lebanon; and Hugh E. Stephenson, Jr., Columbia.

MSMA President Walter T. Gunn, President-Elect E. A. Stricker and Council Chairman James C. Cope were in attendance.

The issue of PSRO—Professional Standards Review Organization—was No. 1 at the convention. Before adopting Report Z of the Board of Trustees and the Council on Medical Service, a lengthy plea by one delegate that the House defer action on the Report, which he called "a complete reversal of our policy," was rejected. Report Z noted that while legislation was pending in Congress, the AMA questioned whether its emphasis on cost control might not lead to a lowering of the quality of medical care. Since it is now law, the report said, AMA should act to guard the interests of the public and the profession.

The AMA Advisory Committee on Professional Standards Review will be created by the Board of Trustees. It will include members of the Board and Council on Medical Service. In addition, the Board may invite other appropriate organizations to participate.

In his address, AMA President Hoffman offered suggestions as to how some long-decried national health problems might be solved.

In reporting on his recent European survey of health care systems, Doctor Hoffman showed a film of his interviews in England, Sweden, West Germany and the Soviet Union. "What impressed

The MSMA officers and delegates meet for a caucus in the Missouri Room each day. Alternate Delegates James C. Sisk of St. Louis County *(left)* and Rae W. Froelich of Lebanon *(right)* confer with AMA Delegate Arthur W. Neilson of St. Louis.

MSMA President Walter T. Gunn *(left)* and AMA President Hoffman enjoy a friendly get-together. All MSMA members and their wives consider the Missouri Room their "headquarters" during this and all other AMA conventions.

me most," he said, "was the fact that the health care problems of the United States also are to be found in these other nations—where economic, political and cultural conditions are so different from our own."

Although the nations he visited also grapple with maldistribution which limits access to medical care for some citizens, he said that "we in the U. S. appear to be sadly deficient in insurance coverage for catastrophic illness." He suggested that a number of conditions be specified as catastrophic, such as hemophilia, stroke, severe burns and severe injuries, and that, perhaps, certain stipulations could be made to provide coverage for unforeseen or extremely unusual situations.

As for maldistribution of doctors, Doctor Hoffman offered what he called "perhaps a revolutionary suggestion" on how to get physicians into rural areas: A "strictly voluntary" program under which needy students could get a medical education with state or federal financing, by signing an unbreakable contract to practice in needy areas for three or four years. He would have no option to repay the loan in cash.

To control the program, medical societies and licensing boards could grant temporary licenses, allowing the physician to practice only in the designated community. After the period of service was complete, the physician would get complete licensure.

Doctor Hoffman's proposals were referred to the Council on Medical Service.

A summary of the 1973 AMA budget, prepared by the Office of Finance and the Finance Committee, drew congratulations from the reference committee which studied it. Also, budget-cutting action recently taken by the Board of Trustees was approved by the House. Fiscal restraint action taken by the Board included the termination of four councils and six committees and making specialty journals available on subscription only, starting January 9. *Prism,* the AMA's new socioeconomic publication, and *JAMA* will be sent as a membership benefit.

"In considering the budget for 1973, the Board of Trustees made a determined effort to exercise fiscal restraint and to allocate our financial resources according to priority needs," the Board said in Report A. The budget summary anticipates 1973 gross revenues of just over $37 million and operating expenses of $36,322,000, leaving a projected surplus of about $800,000.

A revised version of Medicredit will be prepared for introduction in the 93rd Congress, the Board of Trustees reported to the House. The AMA is consulting with the American Dental Association, the National Association of Retail Druggists and the Pharmaceutical Manufacturers Association regarding possible inclusion of dental and drug benefits. Enrollment incentives are being studied. All state medical associations and national specialty societies have been urged to provide suggestions for the revised proposal. The House adopted and referred to the Board a resolution setting forth principles essential to physician participation in the debate on national health insurance. The House also voted to continue to support the pluralistic health care system and oppose the concept of health maintenance organizations as the exclusive or major means of providing health care.

A complete report of the Convention is printed in the December 4 issue of *American Medical News* and contains details of these and other actions taken by the House of Delegates.

'Health Care Delivery' Is Theme for Tenth District Meeting in Farmington

Approximately 60 physicians and their wives from an 18-county Southeast Missouri area attended the annual Tenth Councilor District meeting of the Missouri State Medical Association on November 19, 1972 at the Holiday Inn in Farmington.

Discussion leaders during the Tenth District meeting in Farmington included *(left to right)* Dr. Gordon M. Nunnelly, David T. Berry, Dr. Edward D. Campbell and Dr. Charles P. McGinty of Cape Girardeau. Mr. Berry is Executive Secretary of the Cape Girardeau County Medical Society.

Dr. Jay F. Tuttle *(left)*, superintendent of the Missouri State Hospital in Farmington, and Dr. T. Eugene Ruff of Poplar Bluff.

Theme of the meeting was "Health Care Delivery: The Winds of Change."

A medical education program, which began at 1:30 PM, included presentations on mental health care delivery, comprehensive health planning, medical foundations and health maintenance organizations. Walter T. Gunn, M.D., St. Louis, President of the Missouri State Medical Association, spoke on "The Best Health Care System in the World."

Other participants featured on the afternoon program were Mr. Robert Wildman, Psychologist, Vocational Rehabilitation Department, Farmington State Hospital; Robert W. Kelley, M.D., Chairman, Governor's Advisory Council on Comprehensive Health Planning; Mr. Don Whitehead, Health Planning Specialist, Missouri Department of Community Affairs; and Mr. James B. Hughes, President, Missouri Medical Service.

Eugene T. Hansbrough, M.D., Poplar Bluff, Tenth District Councilor, served as moderator for the program.

Other area physicians on the program included Edward Campbell, M.D. and Charles McGinty, M.D., both of Cape Girardeau, and George Ladyman, M.D., Poplar Bluff.

Doctor Hansbrough, Doctor Gunn and Mrs. Keith D. Jones, Warrensburg, President of the MSMA Woman's Auxiliary, were featured speakers at the 6:30 PM dinner meeting.

Members of Mineral Area Medical Society served as hosts at the meeting.

Counties in the Missouri State Medical Association Tenth District are Bollinger, Butler, Cape Girardeau, Dunklin, Iron, Madison, Mississipi, New Madrid, Pemiscot, Perry, Reynolds, Ripley, St. Francois, Ste. Genevieve, Scott, Stoddard, Washington and Wayne.

Scientific Sessions Important to Every Physician!

115th MSMA ANNUAL SESSION

March 29-April 1, 1973 St. Louis Chase-Park Plaza Hotel

J. E. STOLFI, M.D., F.A.C.P.*

Pre-Hospital Emergency Care of The Heart Attack Patient

EMERGENCY MEDICAL CARE of patients with a coronary heart attack is divided into pre-hospital and in-hospital phases. In-hospital treatment made excellent progress during the last decade, with the development of coronary care units. Pre-hospital treatment has lagged behind.

Mobile emergency rooms and coronary care vehicles deliver medical care to patients quicker and more efficiently. Equipped with monitors, shock equipment and drugs, they allow trained personnel to treat patients on the spot and en route to the hospital.

Nothing has been done to sustain life until a mobile unit arrives. Now, an attempt is being made to provide that missing but essential link. The American College of Physicians has embarked on a mass educational program on cardiopulmonary resuscitation. This prestigious society, by using the expertise of 20,000 members, hopes to implement this lifesaving training program on a nationwide basis.

Cardiopulmonary resuscitation combines mouth-to-mouth respiration and closed heart massage. The latter is accomplished by applying downward pressure on the breastbone with the palm of the hand. By squeezing it toward the backbone, the heart is compressed and blood is forced out into the general circulation. A sudden release of pressure causes the heart to suck blood back into its chambers. If repeated once a second and accompanied by blowing air into the lungs through the mouth (12 times a minute), life can be sustained for periods in excess of 30 minutes.

The knowledge gained in coronary care units, by monitoring patients for long periods, has shown that when the heart stops beating or is rendered inefficient by a rapid or irregular rhythm, it must be restored within four minutes to preserve the brain.

When cardiac arrest occurs in the street, restaurant, theater, sports stadium, golf course or home, it is difficult to provide professional care within that critical period. The number of sudden deaths due to heart attacks annually is about 350,000. To save some of them, we will have to teach, all old enough to understand, the simple but effective resuscitative procedure outlined above. By instructing a large number, help for those stricken may be at their side. Sustaining life until professional help arrives will save thousands of victims each year. The risks involved if the procedure is performed improperly include damage to ribs and bruised organs. Some people may not have a coronary. Subjecting them to resuscitative procedures will do no harm and potential for good greatly outweighs the risks involved.

The College of Physicians, in cooperation with the Heart Associations, will urge physicians to join in this national effort. Demonstrations on mannequins and movie films will be used to train the general public.

Autopsies have revealed that many people who die suddenly have no apparent heart damage. Death may have been caused by a reversible electrical disturbance in rhythm, known as fibrillation. If resuscitated, these individuals could live a normal life.

A side issue concerns legal action against those who perform the procedure improperly. Several states have enacted laws protecting individuals who perform emergency procedures. They should be adopted universally. This legal problem emphasizes the need for good instruction. Interest, cooperation and participation by all members of the medical profession, as well as the general public, is necessary for the success of this vital drive for life.

Well-equipped mobile units staffed with trained personnel are now delivering medical care in a shorter response time to the patient whose life is being sustained. The number is small but ever increasing. A cardiologist and nurse are best prepared to utilize the electrical defibrillators, monitors, rhythm-controlling medications and pain-killing drugs. However, the shortages of both precludes their use. To compensate for this, both cardiologists and anesthesiologists have, for many years, offered training programs in the specifics of treatment and ventilatory techniques. Residents, nurses, aides, attendants and even drivers can be trained to use or help in the application of the special equipment and drugs. Thump version, closed cardiac massage and the use of oxygen, after establishing open air passages, are procedures done frequently by individuals trained to treat heart disease and administer anesthesia. Using these techniques en route to the hospital completes the life sustaining chain. The hospital can be alerted by a two-way communication system and prepare to receive the patient. On arrival at the institution, the heart attack victim is transferred from the vehicle to the intensive or coronary care unit without interrupting treatment. When in the special unit, the cardiologist and the anesthesiologist take over and institute treatment which has already been proven to reduce the percentage of deaths.

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* This article was provided by the Commission on Emergency Medical Services, American Medical Association.

The above depicts the ideal method of treating the individual whose collapse results from a coronary heart attack. It begins at the time of onset and continues through transportation and arrival at the hospital. This is designated as pre-hospital care. The procedures that take place after arrival are classified as in-hospital emergency care. Many articles are available in medical journals that describe the latter in detail and it need not be repeated here.

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New York Heart Association (2 East 64th Street, New York, N. Y.), New York Heart Association training film. "Pulse of Life."

The 69th Annual Congress on Medical Education will be held at the Palmer House in Chicago on Feb. 9-11, 1973. The Congress is presented by the AMA Council on Medical Education in collaboration with the Association for Hospital Medical Education, Association of Schools of Allied Health Professions, Federation of State Medical Boards of the United States and Student American Medical Association.

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WASHINGTON

Congressional leaders have given national health insurance a high priority, but the new Congress convening this month may not act on it until late this year or even next year.

Senate Democratic Leader Mike Mansfield of Montana assigned the legislation "the highest priority" and expressed confidence that a national health insurance program will be approved during the next two years by the 93rd Congress.

The key congressman on this legislation, Rep. Wilbur D. Mills (D-Ark.), chairman of the House Ways and Means Committee, has described the 93rd Congress as moving "to fashion a national health insurance program which the great bulk of Americans can support."

The three major national health insurance bills before the Congress will be the Nixon Administration's proposal financed by employer-employee contributions, the American Medical Association's Medicredit plan and legislation sponsored by Sen. Edward M. Kennedy (D.-Mass.).

The Ways and Means Committee acts first on such legislation and it had been expected to take up tax reform and, possibly, pension plan legislation before national health insurance. This would have deferred national health insurance for at least several months. But the time-table has not been definitely set and Mills recently indicated that tax reform might be given a lower priority.

Another piece of legislation of major importance to the medical profession that will be before the 93rd Congress deals with health maintenance organizations (HMOs). The Senate last year approved a bill authorizing a broad HMO program and the House Health Subcommittee approved a much more limited program.

Democrats remain in control of Congress and the key congressmen on health care legislation will continue to be Mills; Kennedy, chairman of the Senate Health Subcommittee; Rep. Paul G. Rogers (D.-Fla.), chairman of the House Health Subcommittee; and Sen. Russell B. Long (D.-La.).

Both the Ways and Means Committee and the Senate Finance Committee held extensive hearings on national health insurance during the 92nd Congress, but the legislative process must start anew because all pending bills die automatically at the end of a two-year Congress.

Medicredit, slated for early introduction, is being expanded to include home care and limited dental benefits. In the 92nd Congress, Medicredit had 174 sponsors, by far the largest number for any national health insurance legislation.

Kennedy, with the support of organized labor, sponsored the most costly plan in the 92nd Congress. It also called for extensive reorganization of the nation's health care delivery system with the government having a dominant role. At this writing, he had not disclosed any details of his new bill.

He and Mills have conferred on national health legislation to see if they could agree on a program. In a recent speech, Kennedy said that Mills "and I plan to jointly introduce such legislation early next year (1973)." But Mills has not gone quite this far, at least in his public statements. Last fall, Mills said of his talks on the matter with Kennedy:

"We found wide areas of agreement. But obviously, there were key areas where we did not —particularly in the financing and administrative areas. It may be that as we continue to discuss these areas further agreement can be made. I think I will be able to convince him that reliance on the federal treasury and the federal bureaucrat is not the best way to accomplish our common objectives."

* * *

The Bureau of Narcotics and Dangerous Drugs (BNDD) has proposed restricting sales of nine barbiturates which were described as highly addictive and linked to 1,771 suicides and deaths in 17 months.

The Bureau said the barbiturates are more dangerous than heroin.

"Withdrawal from the use of these drugs can be fatal and, in many instances, withdrawal symptoms are more severe from a barbiturate habit than from heroin addiction," BNDD Director John E. Ingersoll said.

He identified the barbiturates by their generic names as amobarbital, butabarbital, cyclobarbital, heptabarbital, pentobarbital, probarbital, secobarbital, talbutal and vinbarbital. He listed only five brand-name drugs: seconal (secobarbital), tuinal (amobarbital and secobarbital), amytol (amobarbital), neumbutal (pentobarbital) and butisol (butabarbital).

The BNDD Director asked the Food and Drug Administration to place the nine barbiturates under the same controls for cocaine, morphine, codeine, methadone and amphetamine.

* * *

W. R. Barclay, M.D., assistant executive vice-president of the American Medical Association, said that the AMA reserves the right to reject drug advertising even if it conforms to Food and Drug Administration regulations.

He said the AMA had accepted the FDA's authority as to drug advertising when it was promulgated in 1968 "after determining that the regulations would provide adequate screening and, furthermore, would have the advantage of being consistently applied to all medical publications, not just AMA journals."

However, Doctor Barclay added, the AMA reserved the further right of rejection, not only as to drugs but to other products too, "if the proposed ad is judged to be in poor taste, if the layout would cause confusion with the editorial content of the journal or if the ad is for a product, service or book which is not covered by FDA regulations and which, in AMA's opinion, does not meet our standards of acceptability."

Doctor Barclay said the impact of advertising on drug prescribing, use and misuse is not known.

"No scientific data has been developed on this question, and no reliable method has been proposed to acquire such data," Doctor Barclay said. "Ads placed in scientific journals reach a well-educated, well-informed and broadly-experienced audience that has access to many sources of scientific information. Since all material in such ads has been judged by FDA to be correct and accurate, it is difficult to see how such advertisements could adversely affect prescribing practices. In spite of the plethora of information available to physicians, AMA has developed and distributed without charge to its members its own evaluation of drug products. This book is titled *AMA Drug Evaluations* and is usually referred to as 'ADE.' Unfortunately, we are in no better position to judge the impact of this book than we are to judge the impact of advertising or editorial copy in our journals."

Dr. Barclay outlined the AMA's position at a public hearing of the National Council of Churches.

Gantrisin® (sulfisoxazole) Roche® provides your patients with many important advantages:

- high urinary levels
- generally good tolerance
- high solubility at average urinary pH
- rapid absorption
- rapid renal clearance
- high plasma concentrations
- economy (average cost of therapy: less than 6½¢ per tablet)

Before prescribing, please consult complete prod
information, a summary of which follows:
Indications: Nonobstructed urinary tract infecti
(mainly cystitis, pyelitis, pyelonephritis) due to s
ceptible organisms. **Important Note:** ***In vitro*** **s**
sitivity tests not always reliable; must be coordina
with bacteriological and clinical response. A
aminobenzoic acid to follow-up culture media.
creasing frequency of resistant organisms limits u
fulness of antibacterial agents, especially in chro
and recurrent urinary infections. Maximum safe t
sulfonamide blood level, 20 mg/100 ml; meas
levels as variations may occur.
Contraindications: Hypersensitivity to sulfonamid
infants less than 2 months of age; pregnancy at te
and during the nursing period.
Warnings: Safety in pregnancy not established.
not use for group A beta-hemolytic streptococcal
fections, as sequelae (rheumatic fever, glomerulo
phritis) are not prevented. Deaths reported fr
hypersensitivity reactions, agranulocytosis, apla
anemia and other blood dyscrasias. Sore throat, fe
pallor, purpura or jaundice may be early indicati
of serious blood disorders. CBC and urinalysis w
careful microscopic examination should be perform
frequently.
Precautions: Use cautiously in patients with impai
renal or hepatic function, severe allergy or bronc
asthma. Hemolysis, frequently dose related, may
cur in glucose-6-phosphate dehydrogenase-defici
patients. Maintain adequate fluid intake to prev
crystalluria and stone formation.
Adverse Reactions: *Blood dyscrasias:* Agranulo
tosis, aplastic anemia, thrombocytopenia, leukope
hemolytic anemia, purpura, hypoprothrombinemia a
methemoglobinemia; *Allergic reactions:* Erythe
multiforme (Stevens-Johnson syndrome), generaliz
skin eruptions, epidermal necrolysis, urticaria, ser
sickness, pruritus, exfoliative dermatitis, anaphyl
toid reactions, periorbital edema, conjunctival a
scleral injection, photosensitization, arthralgia and
lergic myocarditis; *Gastrointestinal reactions:* Naus
emesis, abdominal pains, hepatitis, diarrhea, a
rexia, pancreatitis and stomatitis; *C.N.S. reactio*
Headache, peripheral neuritis, mental depressi
convulsions, ataxia, hallucinations, tinnitus, verti
and insomnia; *Miscellaneous reactions:* Drug fev
chills and toxic nephrosis with oliguria and anu
Periarteritis nodosa and L.E. phenomenon have
curred. Due to certain chemical similarities with so
goitrogens, diuretics (acetazolamide, thiazides) a
oral hypoglycemic agents, sulfonamides have caus
rare instances of goiter production, diuresis and hy
glycemia as well as thyroid malignancies in rats
lowing long-term administration. Cross-sensitiv
with these agents may exist.
Supplied: Tablets containing 0.5 Gm sulfisoxazole.

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TWO BUILT-IN BENEFITS OF GANTRISIN®

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1.

High urinary drug levels
Gantrisin quickly reaches peak antibacterial concentrations in the urine—usually in 2 to 3 hours. With the recommended dosage regimen, Gantrisin maintains these high urinary levels throughout therapy to combat such susceptible organisms as *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris.*

2.

Generally good tolerance
Because of Gantrisin's high solubility and rapid excretion, therapy is relatively free of adverse reactions serious enough to require discontinuance of the drug (3.1% of 1002 patients in a recent study*). Even minor reactions are comparatively infrequent, but may include nausea, headache and vomiting. For other possible undesirable reactions, and precautions, please see summary of prescribing information on opposite page.

*Koch-Weser, J., *et al.*: *Arch. Intern. Med.*, *128* 399, 1971.

For nonobstructed cystitis

begin with

Gantrisin®

sulfisoxazole/Roche®

Usual adult dosage:
4 to 8 tablets *stat*
2 to 4 tablets *q.i.d.*

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Notes of interest from Here . . . . and There

The Missouri State Board of Health has elected **Dr. William D. Bradshaw** of Clinton as vice-chairman. Doctor Bradshaw has been in general practice in Clinton since 1955 and is Councilor for the MSMA Sixth District. Chairman of the board is **Mr. Lester L. Cox** of Springfield.

Dr. Melvin Tess, first deputy health commissioner of the Division of Health for the City of St. Louis ended a 36-year career in public health when he retired on Dec. 20, 1972. Doctor Tess began his public health career as a school physician with the St. Louis Health Division in 1936 and received a master's degree in public health from the University of Michigan in 1940. He became assistant health commissioner in 1949 and was acting health commissioner during the four years that **Dr. J. Earl Smith** was on leave of absence.

Dr. Lynn M. Garner was honored at a dinner on Nov. 15, 1972 in Jefferson City observing his retirement from the Missouri Division of Health following 41 years of service. Secretary of State **James C. Kirkpatrick** was the speaker at the dinner. Doctor Garner compiled the longest continuous employment record in the history of the Division of Health. He joined the Division of Health on July 1, 1931. He advanced through the health agency ranks and on June 1, 1965 he was named by **Gov. Warren E. Hearnes** to be acting director of the Division of Health, a position he held until Jan. 1, 1971 when he was succeeded by the present director, Dr. **Herbert R. Domke.**

Dr. Albert M. Estes, Cape Girardeau, who pioneered the use of electrocardiographic equipment in Southeast Missouri, was cited recently by having the cardiac care unit of St. Francis Hospital and that of the hospital's future medical center named in his honor. The cardiac units will become known as Dr. Albert M. Estes Cardiac Station in recognition of his 33 years of internal medicine practice in Jackson and Cape Girardeau during which he specialized in heart care. The citation was made by **Dr. Raymond A. Ritter,** a member of the hospital's staff.

Dr. David D. Thomasson, Springfield, was named to represent the Missouri Heart Association at the annual meeting and scientific sessions of the American Heart Association in Dallas, Tex. on Nov. 19-21, 1972.—**Dr. Charles E. Lockhart,** Springfield, has been named chairman of the American Cancer Society's National Service and Rehabilitation Subcommittee on Honors. Recently elected to the ACS National Board of Directors as a medical delegate for a two-year term, Doctor Lockhart will serve on the ACS's Medical and Scientific Committee.

Dr. G. G. Robinson has retired after 31 years in the practice of medicine in Humansville. A 1933 graduate of the University of Kansas School of Medicine, he practiced in Georgia before moving to Humansville in 1941. Doctor Robinson is a former city councilman and past-president of the Chamber of Commerce.

MSMA Members Enjoy Caribbean Cruise

Sixty MSMA members and their wives and guests sailed from Miami, Fla. on Nov. 11, 1972 on the first MSMA-sponsored convention cruise to the Caribbean and participated in scientific sessions aboard the M S Boheme. The tour visited Puerto Plata, St. Thomas, San Juan and Haiti.

Medical seminars for the physicians were held aboard ship on the three full days at sea. Speakers at the various sessions included Drs. Peter G. Danis, Belmont R. Thiele, Richard F. Huck, Thomas J. Cooper and Harold K. Roberts, all of St. Louis; William D. Hoadley, John F. Bowser, Alfred D. Biggs, Jr., Gerald L. Miller and Thomas R. Hunt, all of Kansas City; Daniel L. Yancey of Springfield; and Trevor F. Watson of Columbia. The program was acceptable for 12 AAFP elective hours.

All members enjoyed swimming, sunning, skeet shooting, shuffleboard and tennis on board ship. Social activities included a gala Masquerade Party as well as welcome and farewell parties while at sea.

The success of the tour is indicated in the following excerpts from letters received by Royal O. Cooper, MSMA Assistant Executive Secretary and program director for the tour:

"The scientific portion of this trip was particularly good . . . I consider it an outstanding program. The additional rest and recreation provided a plus-value which cannot be estimated. Please convey to the Council of the MSMA my appreciation for the opportunity offered and my hope that this is the first in a long series of similar MSMA activities."—Roy W. Pearse, Jr., M.D., Nevada.

"I feel the place of meeting was idyllic and that the program content was worthwhile. The whole cruise was well organized, and we thank you for it."—John F. Bowser, M.D., Kansas City.

"The speakers' topics were well chosen and well presented. I think that the Council should give consideration to another such meeting. . . . Thanks for an enjoyable and educational experience."—James A. Hasek, Mountain Grove.

"We saw many old friends whom we had not seen in some time. The lectures were very good and the accommodations and service were excellent."—Robert V. Brennan, M.D., Kirkwood.

(Right to left) Dr. Ronald G. Shriver of Poplar Bluff, Dr. Owen W. D. Craig of St. Joseph, Mrs. Craig and Mrs. Shriver go aboard the MS Boheme at San Juan to sail on to Cap Haitien, the fourth exciting port in the one-week cruise.

MSMA members take advantage of the opportunity to attend the excellent medical seminars held on board ship.

Mrs. Gerald L. Miller, Kansas City, makes friends with two young natives in Puerto Plata, the "port of silver" on the north coast of the Dominican Republic.

SYNTHROID
T4

T_4 IS THE PREDICTABLE HORMONE BECAUSE IT LOVES PROTEIN.

SYNTHROID® (sodium levothyroxine) is pure synthetic T_4, the major circulating thyroid hormone. It is reliable to use because of its affinity for protein-binding sites in the blood. T_3 is more fickle. Sometimes it binds. Sometimes it doesn't. T_4 more *predictably* binds to protein.

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ALL THYROID-FUNCTION TESTS ARE USEFUL IN MONITORING SYNTHROID THERAPY

No calculations are needed, test interpretation is simple.

Any of the commonly used T_4 thyroid function tests (P.B.I., T_4 By Column, Murphy-Pattee, Free Thyroxine) are useful in monitoring patients on T_4 because they *all* measure T_4. Patients on SYNTHROID are thereby easy to monitor because their results will fall within predictable, elevated test ranges. Of course, clinical assessment is the best criterion of the thyroid status of the drug-treated patient.

HISTORICAL
MARKER

TWO GOOD REASONS WHY THE ROAD TO NORMALIZED THYROID STATUS IS SO SMOOTH FOR THE SYNTHROID PATIENT.

(1) The onset of action of T_4 is gradual. It has a long in vivo "half-life" of over six days. (Occasional missed doses or accidental double-doses are of less concern because of this factor)[1]; (2) since SYNTHROID contains only T_4, the potential for metabolic surges traceable to more potent iodides (T_3) is eliminated.

TEST	HYPOTHYROID	SYNTHROID THERAPEUTIC NORMAL
P.B.I.	Less than 4 mcg %	6-10 mcg %
T_4 By Column	Less than 3 mcg %	7-9 mcg %
T_3 (Resin)	Less than 25%	27-35%
T_3 (Red Cell)	Less than 11%	11.5-18%
Free Thyroxine	Less than 0.7 nanograms %	0.7-2.5 nanograms %
Murphy-Pattee	Less than 2.9 mcg %	4-11 mcg %

AS WITH ANY THYROID PREPARATION, CAUTIOUS OBSERVATION OF THE PATIENT DURING THE BEGINNING OF THERAPY WILL ALERT THE PHYSICIAN TO ANY UNTOWARD EFFECTS.

Side effects, when they do occur, are related to excessive dosage. Caution should be exercised in administering the drug to patients with cardiovascular disease. Read the accompanying prescribing information for additional data or write Flint Laboratories.

Choose the Smooth Road ...to thyroid replacement therapy

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G CONTAINING
ROXINE ALONE.

ine (T_4) is, as you know,
jor circulating hormone
ed by the thyroid gland.
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presence of T_3 in these
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dium levothyroxine)

FACTS ARE
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S:

etic thyroid drugs are an
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can be completely
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. Thyroid function tests are
to interpret since they are
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synthetic thyroid drugs,
HROID is the most
mical to the patient.

WHY DOES SYNTHROID COST LESS THAN SYNTHETIC DRUGS CONTAINING T_3?

Very simple. T_3 costs more to make synthetically than does T_4. So it is economically necessary for a synthetic thyroid medication containing T_3 to cost more than one containing T_4 alone. Synthetic combinations cost patients nearly 50% more than SYNTHROID[3] because the T_3 costs more to start with; also there is the additional expense of formulating a tablet containing two active ingredients.

1. Latiolais, C. J., and Berry, C. C.: Misuse of Prescription Medications by Outpatients, *Drug Intelligence & Clin. Pharm.* 3:270-7, 1969.
2. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T4) to Triiodothyronine (T3) in Athyreotic Human Subjects, *J. Clin. Invest.* **49**:855-64, 1970.
3. American Druggist BLUEBOOK, March, 1971.

OFFER:
Free TAB-MINDER medication dispensers to start or convert all your hypothyroid patients to SYNTHROID. Free information to physicians on role of thyroid function tests in a new booklet titled: "Guideposts to Thyroid Therapy." Ask us.

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Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. Indications for SYNTHROID (sodium levothyroxine) **Tablets** include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (nontoxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) **for Injection** is indicated for intravenous use in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. The injection is also indicated for intramuscular use in cases where the oral route is suspect or contraindicated due to existing conditions or to absorption defects, and when a rapid onset of effect is not desired.

Precautions: As with other thyroid preparations, an overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction. **Side effects:** The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction of dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) for **Injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

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in Brief

A summary of AMA, medical & health news

American Medical Association / 535 North Dearborn Street / Chicago, Illinois 60610 / Phone (312) 527-1500 / TWX 910-221-0300

The AMA has proposed that physicians in corporate practice be granted regulatory relief to alleviate their unique problems under Phase 2 controls. The recommendation was made by the AMA Center for Health Services Research and Development in a presentation before the Health Service Industry's Subcommittee on Non-Institutional Providers. The AMA said many of the 30,000 physicians in corporate practice are being penalized through double taxation, thus creating disincentives to increase productivity. Most equitable solution would be to permit corporate physicians to increase their incomes without limit, but not to permit use of any part of this increase as cost justification for raising fees, the AMA said. The Medical Group Management Assn. presented supporting evidence. The AMA received assistance from the American Assn. of Medical Clinics in preparing testimony.

Yielding to protests by physicians, the Social Security Administration has deleted a provision that required the mark of illiterate or physically handicapped Medicare beneficiaries to be witnessed by someone not associated with the physician of record or other provider. The provision was dropped in September, 1972, after having been in effect for six months.

The "awful consequences" of chiropractic are described in the report of a study committee to the Wisconsin Governor's Health Planning and Policy Task Force. The committee emphasized that chiropractic treatment "frequently delays effective medical care until it is too late," often aggravates conditions, and "sometimes produces actual physical damage to patients." It outlined steps that should be taken to protect citizens against the potential hazards of chiropractic. Copies may be obtained from all medical societies.

The AMA is serving as a clearinghouse for students seeking financial assistance to help them train for careers in medicine and allied fields. The two-phase public service program, known as FIND (Financial Information National Directory), is being conducted with the full cooperation of health professions organizations, governmental agencies, schools and private organizations. More than 1,000 sources of financial aid are listed in the directory, *FIND '72-Health Careers*. Copies, $2.95 each, are available from Order Dept., AMA. The program also includes a computer search service that matches a student's needs and qualifications with current sources of funds. Write FIND, AMA, for information.

Medicine still leads all other institutions in public confidence ratings, a 1972 Harris Survey revealed. Forty-eight percent of the respondents expressed "a great deal of confidence" in the leadership of medicine, but that reflected a sharp decline from a year ago when the figure was 61%. It was 72% in 1966. Medicine previously had appeared "to be immune from the tide of disenchantment that had swept over most other leadership groups," Harris commented. Financial leaders placed second in the public esteem with a 39% "great deal of confidence" rating. Held in the lowest regard among the 16 groups covered by the survey were advertising (12%), labor (15%), television (17%) and the press (18%).

New Medicare provision for coverage of "specified chiropractic services" contains tight restrictions, HEW Undersecretary John Veneman said. Noting that the Administration is "not very supportive" of the chiropractic provision, Veneman said the most limiting restriction is that subluxation of the spine must be demonstrated by x-ray. Veneman also said review of chiropractic services will be performed exclusively by physicians in Professional Standards Review Organizations. To be eligible for Medicare reimbursement, effective July 1, 1973, a chiropractor must be licensed in his state and comply with minimum standards to be set by the HEW secretary.

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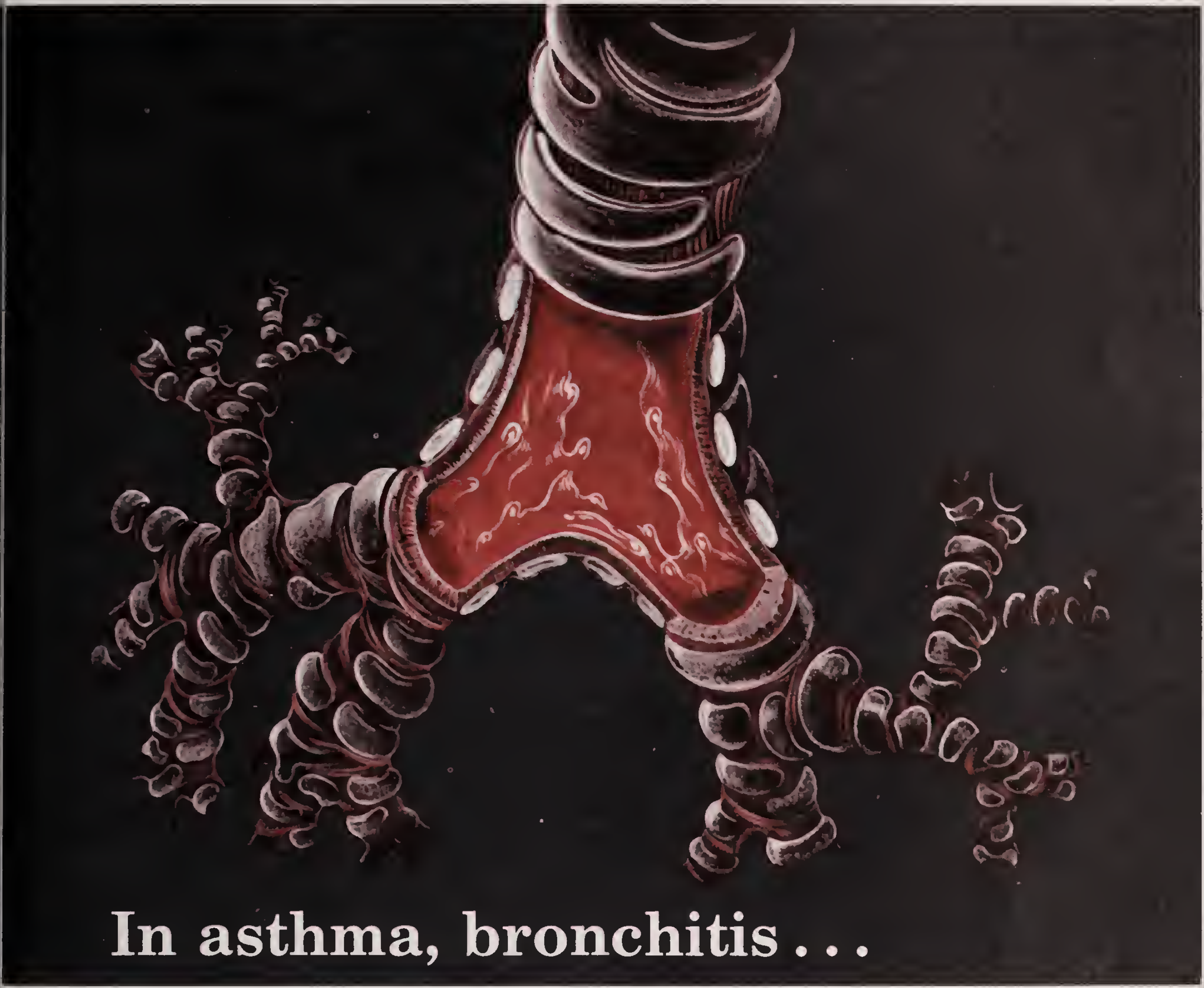

In asthma, bronchitis . . .

"Many physicians use iodides intravenously when they suspect that the main reason for airway obstruction is sticky mucus but oral iodides are more likely to exert an expectorant action."[1]

"For the viscid sputum, potassium iodide (... preferable as enteric coated tablets) may be best."[2]

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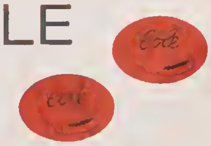

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". . . there is clear evidence that the loosening of the bronchial mucus blanket must begin from within the underlying mucus glands where it is anchored and not from the surface. Complications of iodides are too occasional to avoid the use of this valuable medication."[3]

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RESPIRATORY DISEASE: The use of Iodo-Niacin is indicated whenever an expectorant action is desired to increase the flow of bronchial secretion and thin out tenacious mucus as seen in bronchial asthma, and other chronic pulmonary disease. Iodo-Niacin has also proven of value in sinusitis, bronchitis, bronchiectasis, and other chronic and acute respiratory diseases where the expectorant action of iodide is desired.

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ARTERIOSCLEROSIS: Iodides have been reported as relieving some of the symptoms associated with arteriosclerosis. The mechanism of action is unknown, but the effects are documented.

OPHTHALMOLOGY: Iodo-Niacin has been reported to be of value in retinal and vitreous hemorrhages. The mechanism of action is unknown, but absorption of the hemorrhagic areas has been observed following use of this drug. It is also reported to be of value in reducing or removing vitreous floaters.

SIDE EFFECTS: Serious adverse side effects from the use of Iodo-Niacin are rare. Mild symptoms of iodism such as metallic taste, skin rash, mucous membrane ulceration, salivary gland swelling, and gastric distress have occurred occasionally. These generally subside promptly when the drug is discontinued. Pulmonary tuberculosis is considered a contraindication to the use of iodides by some authorities, and the drug should be used with caution in such cases. Rare cases of goiter with hypothyroidism have been reported in adults who had taken iodides over a prolonged period of time, and in newborn infants whose mothers had taken iodides for prolonged periods. The signs and symptoms regressed spontaneously after iodides were discontinued. The causal relationship and exact mechanism of action of iodides in this phenomenon are unknown. Appropriate precautions should be followed in pregnancy and in individuals receiving Iodo-Niacin for prolonged periods.

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References: 1. Itkin, I. H., Am. Fam. Phys. 4:83, 1971. 2. Feinberg, S. M., Consultant Sept., 1971, pg. 32. 3. Bookman, R., Ann. Allerg. 29:367, 1971.

vertisement

> *"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."*
>
> *—George Sarton, from "The History of Medicine Versus the History of Art"*

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion

Results of a questionnaire to 7,000 physicians:

62.9%
Believe combination drug products are useful.

13.8%
Do not believe combination drug products are useful.

Are combination drug produc
useful in treatment involvi
concomitant use of two or more drug

Opinion & Dialogue

Doctor of Medicine

Louis Lasagna, M.D.
Professor and Chairman
Department of
Pharmacology & Toxicology
University of Rochester
School of Medicine
and Dentistry

Obviously, many drugs are given concomitantly. Whether it makes sense to combine medications in one preparation, be it capsule, tablet, or liquid, is a question that can be answered only by examining the advantages and disadvantages in the individual case.

Among the advantages is, first of all, convenience. The more medications that are taken concurrently and the more complicated the directions, the less likely the patient is to take medications accurately. From the standpoint of convenience and accuracy, and economy as well, you can make an important case for putting medications together in one preparation, as long as they are compatible.

By the same token, when you prescribe a properly tested and rational combination, you should have less worry about pharmaceutical or pharmacological compatibility – and about reasonable dosage ratios as well. Compatibility of the formulation should be demonstrated in the laboratory and clinic before the product is available for prescription—which is more than can usually be said for the physician's own spontaneous creations. And, the dosage ratios employed in rational precompounded combinations are designed to meet the needs of substantial numbers of "typical" patients.

There is no doubt that many "atypical" patients are to be found, and for them the prefabricated combination must be rejected. But that hardly argues for eliminating rational combinations from the market. Think, for example, of the problems that would arise if the components of widely accepted combinations, like the oral contraceptives and the diuretic-antihypertensives, always had to be prescribed, purchased and ingested separately.

One disadvantage that comes to mind is some doctors' unawareness of the ingredients a given combination contains. For example, a doctor might know that a patient is allergic to aspirin but forget that a certain analgesic mixture, which he knows only by its trade name, contains aspirin. His prescription, then, causes considerable discomfort, to say the least. This problem is a function of physician education, rather than of combination therapy as such. Improving doctors' knowledge about all medicaments they prescribe is a problem that deserves tackling on its own.

Another accusation leveled at combination drugs is that they encourage sloppiness of diagnosis and treatment. In many cases, however, a combination may prove to be the most effective choice. A good example of the usefulness of combinations appears in a recent article in the *Journal of Chronic Diseases* on the efficacy and side effects of an antihypertensive containing three ingredients, in which the track records of the combination drug and the individual ingredients were compared. Interestingly enough, whether the drugs were given individually or together, incidence and severity of side effects were the same. But blood pressure control was invariably better when the drugs were taken in one combination tablet than when they were taken separately (in "titratable" dosage) or in two or three different tablets.

Deciding which combinations constitute rational therapy obviously leads to a discussion of who is to determine which should be used and which should not. Realistically, I think combinations should be evaluated somewhat differently if they are old and established or new and untried.

In today's regulatory atmosphere, there is no possibility of a new combination being put on the market without a substantial amount of acceptable evidence in the form of controlled trials that show it to be safe and efficacious. On the other hand, I believe a different set of standards should apply to combination preparations that have been around for a long time. In other words, physician acceptance over a long period should be given some weight as evidence of the efficacy and safety of these drugs.

The FDA, however, does not seem to share this attitude. It often requires, for these older products, controlled trials that will monopolize the time of already overtired investigators and cost a grea
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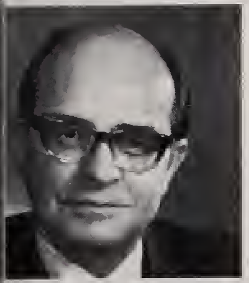
Maker of Medicine

Clarke Wescoe, M.D.
President
inthrop Laboratories



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cism generated against combinations generally. Obviously, no one should be exposed willy-nilly to the potential side effects of two or three antibiotics when only one is needed. At the same time there are cases where it is prudent to prescribe more than one. The clinician is the judge in these circumstances, as he should be.

There is no clear definition of the word rational. Most persons, I suppose, would find it synonymous with reasonable, but in many circumstances it may best be defined as the opinion of those in power at the moment.

Other factors govern combination therapy, not the least of which has been its broad use by practicing physicians anxious to achieve convenience in prescribing, to reduce medication error, and to save money for their patients. Combinations clearly have met the test on all three counts.

I have been impressed by studies showing that the rate of error climbs markedly with the number of medications to be taken, even with sophisticated patients. When medically justified, therefore, this factor alone supports the logic of combination therapy.

The cost argument for combinations appears to be irrefutable. In 1971, R. A. Gosselin studied the 71 combination products (excluding oral contraceptives) among the 200 most prescribed drugs. The study found that if all 71 products were discontinued, and if each ingredient in these combinations were prescribed separately, the price of medicines to patients would jump by $443.2 million on a national basis! At a time when the cost of medical care is under so much fire, it would be nonsensical to boost costs without clearly irrefutable medical reasons.

The part played by government on this question, of course, is fundamental. The FDA should play a role in determining which combinations are reasonable. That role, as defined by law and regulation, is to ensure that any medication on the market is safe and effective in line with its label claims. Certainly combinations are entitled to as much consideration as single entities—neither more nor less. So long as the addition of one drug to another does not make either less safe, or less effective, so long as they are compatible in a formulation, we have a reasonable product. It makes no sense to recommend the use of two products for certain conditions and to deny their being combined in a single form. An unhappy side effect of the problem concerns the efficacy panel discussions of many products submitted for review. The term "effective, but" has been freely interpreted to mean "ineffective" in toto, regardless of the merit of the individual drugs. This interpretation has placed numerous useful combination products in needless jeopardy.

In reading the actual reports of the review panels, it seems clear that some of the ratings were based less on scientific research and clinical observation than on the "informed" opinions of the panelists. These "informed" opinions were accepted at face value, while the "informed" opinions of others who had used the products were rejected. All of this put combination products into a sort of scientific never-never land.

It should be kept in mind by all, government as well as others involved in our health care system, that advances in therapy are seldom made in leaps and bounds but rather by small painstaking steps—and that some of these steps have resulted from research in combination drugs as well as with single entities. Given the near-infinite biologic variation in patient response, this is hardly surprising to clinicians. It should not be to regulatory agencies either.

In the end, the practicing physician is in the best position to decide if a particular combination makes sense. Such a decision should not be made exclusively by those whose responsibility for continuing clinical care is limited. Clinicians are the best judges of efficacy because the ultimate proof of any product's effectiveness is acceptance by physicians who have observed its actions in patients over time. The corollary statement may be made about over-the-counter medicines, which would not long survive if they failed to afford the relief the user anticipates. That the antihistamine in a "cold" remedy may not *always* be necessary is no reason to proscribe the combination generally.

Opinion & Dialogue

What is your opinion, doctor?
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Missouri Medicine

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PAUL E. HILTON, M.D. *and*
PHILIP C. ANDERSON, M.D., ***Columbia***

Cutaneous Effects of Cold Exposure

Severe injury due to freezing has almost been eliminated by the warm homes, heated cars and modern clothing of present day Americans. However, minor disorders due to cold are still very common, for example, chapping, asteatotic eczema, livedo of the legs or transient vasospasm in the hands. Diseases aggravated by cold include dysproteinemias, ichthyosis, atopic dermatitis, psoriasis of the feet and fingers, diabetic dermatopathy and circulatory deficiency generally. Studies concerning the biology of cold injury have been advanced by medical interest in freeze-preservation of skin, and this new information is summarized in this article. The most common clinical disorders are described and the current treatment summarized.

Biological Changes

Generally, the first results of cold exposure are to depress enzyme actions, dehydrate cells and concentrate intracellular electrolytes. The secondary effects of cold on the vascular supply are increased blood viscosity, vasoconstriction and stasis. Both actions are responsible for the anoxic necrosis of cold injury.

Direct Injury

Severe freezing of living tissue causes ice crystal formation in the extracellular space. Intracellular water is drawn into this crystal mass causing concentration of intracellular contents.[1] The low vapor pressure of cold water forces the water across the cell membrane as does the osmotic gradient.[2] Further, the increasing extracellular ice mechanically compresses water from the cells.[2] These forces cause severe and often fatal changes in cell functions, particularly to the cell membranes.

If cooling is very rapid and if water is unable to leave the cell rapidly, the freezing then occurs inside the cell and total disruption follows. Slow cooling results in cellular dehydration with extracellular ice formation, while rapid cooling produces intracellular ice and disintegration of the cell.[3]

The sodium-ion content of cellular fluids is crucial in the reaction to freezing. While the potassium-ion is of lesser importance than the NA^+, it nevertheless exerts its influence in much the same manner. Transition from water to ice is delayed greatly by concentrating sodium ions. Even more important, perhaps, is the effect of tissue hyper-natremia on increasing permeability of cell membranes, facilitating a protective transient dehydration of tissue. This increases intracellular sodium chloride and lowers the freezing point. In extreme cold, however, both salt and water crystallize to destroy the living tissues, but at this point, the full range of protective responses has been exhausted.

Dehydration and electrolyte transport are the principal causes of complete or partial destruction of protein. Protein stability relies on a pH of about 7.4.

The rate of freezing influences cell survival. During slow freezing, extracellular ice forms

Although minor skin diseases due to cold affect many people during the winter season, they are often neglected. The authors describe the most common clinical disorders and summarize current treatment, including freeze-preservation of skin. The authors are from the Division of Dermatology, Department of Medicine, University of Missouri Medical Center. Doctor Anderson is Chief of the Division.

draw water slowly from the cell, while during thawing, water may return to the cell without injury to the cell membrane. Merryman[1] stressed that slow freezing is the usual clinical event. Rapid freezing of skin is practically unobtainable except by the application of liquid nitrogen or similar unusual means.

The rate of warming also is of great importance. If frozen tissue is slowly warmed, recrystallization of intracellular ice occurs and cells are less likely to survive. Therefore, cell death rate is greater in the event of rapid cooling (100 C/min) and slow warming (1-10 C/min). Several variables have been cited in freezing injury: (a) duration of cold exposure, (b) temperature of exposure, (c) rapidity of freezing and (d) rapidity of rewarming.[4]

Vascular Injury

Lapp and Jergenson,[5] in their excellent review article, describe the vascular effects of frostbite. "Freezing" or "cold injury" of tissue begins about 50 F (10 C),[6] and 23 F (–5 C) is the lowest temperature to which cells may be slowly frozen and still survive.[7] However, vasoconstriction is significant even above this temperature. For example, blood flow is reduced to 3% of normal in the arm immersed in water at 55 F (13 C) for two hours.[8]

Vasoconstriction of the dermal blood vessels is due to a direct effect of cold on the vessels as well as to the central vasoconstrictor centers of the brain responding to a cooling of the peripheral blood. At maximum vasoconstriction, the skin appears pale (at about 0 C), but at approximately 15 C all metabolism and oxygen needs are reduced so that a relative oxygen surplus occurs, causing the skin to become erythematous. A sensation of warmth or burning is felt. Low skin temperature occurs with loss of pain and touch sensation and increased skin redness.

The "hunting phenomenon" of Lewis[9] is a transient paradoxical cold induced vasodilatation associated with an increase of skin temperature and brief relief of accompanying pain. It follows vasoconstriction due to rather prolonged cold. This cycle of warming recurs several times during continued cold exposure and is due to opening and closing of arteriovenous anastomoses.

A reflex constriction of the precapillary sphincters causes A-V shunting and, also, aggravates capillary stasis. Tissue anoxia, histamine release and local vessel damage increase capillary permeability and cause edema. Thawing of tissues causes increased blood flow, hyperemia, liberation of histamine and minute thrombi, which also result in local edema. Generally, with cold stimulus, the venules constrict more than the arterioles and the arterioles dilate more upon rewarming. This also results in local edema after the restarting of arterial flow.[4]

Impaired circulation is the most important factor during the recovery phase of frostbite. When cell metabolism ceases in frozen cells, vasospasm or free histamine have no injurious effects. After thawing, vasospasm of the small vessels results in anoxia, histamine injures cells and the metabolic needs of thawing cells are denied or disrupted. Experimental evidence is clear concerning the necessity of promptly restoring circulation after cold exposure. The consequences of anoxia are well-described.[6, 10-13]

Early Sequelae of Cold Injury

Initially, there is pallor. One hour after freezing, subcutaneous edema forms, resulting in the presence of vesicles and bullae.[5] A hyperemic zone occurs at the tissue line of demarcation due to reactive vasodilation. The early edema peaks at 48 to 72 hours. Pain, burning, itching and tingling result and are associated with injury to nerves, muscles, cartilage, vessels and even bone. True thermal injury with evidence of muscle damage may occur within 15 minutes of cold injury.[14]

Skin atrophy and keratinization may occur later. The connective tissue becomes sclerotic, the elastic tissue and skin appendages may disappear and melanin accumulates in the basal layer. If severe enough, actual skin necrosis will occur. After the occurrence of necrosis and gangrene, a final line of demarcation usually occurs within 60 to 90 days.

After four months, the most common physical signs are painful feet, hyperhidrosis, skin tenderness, numbness and tingling.[15]

Late Sequelae of Cold Injury

Numerous physical changes result from severe frostbite. Those noted four years after frostbite are hyperhidrosis, chronic pain, cold feet, numbness, color changes and joint symptoms.[16] Ultimately, severe frostbite results in skin necrosis with tissue loss, hypopigmentation, thickened skin with growth disturbances and nail abnormality. Severe scarring, deformity and mutilation result from the most severe injury. Moderate frostbite results in minor changes such as erythema, vesiculation leading to hyperhidrosis, color changes and mild joint symptoms. After five to 18 years, the most usual persistent abnormalities are sensitivity to cold, color changes, hyperhidrosis, hyperkeratosis, scarring, hyperesthesia, pain or transitory numbness.

Hair and Nail Growth Changes

Nail and hair growth decreases in cold weather. In Antarctica, with living temperature at 44.6 C to 48.2 C, nail and hair growth was 60% of normal. MacLean[17] noted a hair growth of 50% with living temperature near freezing. This indicates a decreased metabolism of the body surface. Cold acclimatization indicates a requirement for lowering the body surface temperature, and the decreased hair and nail growth indicates success in cold acclimatization.

Diseases of Cold

Diseases caused by cold are dependent upon the temperature, amount of exposure, immobility, health and age of the person. The effects may range from mild erythema to gangrene. Allergic mechanisms involving abnormal plasma proteins also may contribute to the variation. The list in Fig. 1 includes diseases associated with cold followed by a few of the more uncommon clinical conditions.

Frostbite

Frostbite is the actual freezing of tissue caused by sufficient cold exposure of –2 C to –10 C.[4, 18] Contributory factors are lack of proper clothing, wind, moisture, circulatory disease, anoxia, immobility and poor general health.

The frozen tissue becomes waxy and white and numb. If frozen a short time, hyperemia follows rewarming and is associated with discomfort. A return to normal can be expected within a few hours. If freezing is prolonged, edema, vesiculation, ulceration and even gangrene may occur. Symptoms relative to damaged nerves and vessels may occur with hyperhidrosis, cold sensitivity, paraesthesia, hyperesthesia and anesthesia.

Diseases Caused By or Associated With Cold

Common Conditions
Frostbite
Asteatotic eczema and chapping
Hyperhidrosis
Livedo reticularis
Benign vasospastic conditions

Uncommon Conditions
Trenchfoot, immersion foote
Chilblain
Raynaud's disease and condition
Cold urticaria
Cold hemolysin syndrome
Cryoglobulinemia
Cryofibinogenemia
Cold agglutination syndrome
Cold erythema
Acrocyanosis
Erythrocyanosis

Fig. 1

In the past, therapy for frostbite was a gradual warming of the affected part with immersion in cool water or even rubbing with snow and ice.[4] It has been shown, however, that rapid rewarming is more effective[1] due to the beneficial effects of increased circulation and decreased exposure time.[12] This results in quickly improved circulation and maximum blood flow to the part by the direct effect of heat on the blood vessels. This is associated with less destruction of blood vessel walls, increased proliferation of endothelial cells, fewer changes in the ground substance and a reduction in the damaging effect of the increased intracellular electrolyte concentration. Less tissue destruction and gangrene occurs. Rapid thawing, however, may lead to increased edema due to an inflammatory response resulting in vesiculation, hyperemia and pain, which may be severe and require analgesics.

Slow thawing results in a marked shedding of endothelial cells into the vessel lumen with increased destruction of vessel walls and more tissue gangrene. Specifically, soaking in warm water at 104 F to 111 F (or 40 C to 44 C) for 20 minutes or more is optimal.[5] Heating should continue until skin attains a pink color or to no further color change. Higher temperature is injurious, and open fire and other dry heat should be avoided. Early use of analgesics, sedation, antihistamines, general body warmth, hot liquids, sterile care, in general, and avoidance of trauma are most important. Early surgery, even debridement, is contraindicated until at least 36 to 48 hours have elapsed. Sympathectomy may be beneficial by interrupting the vasoconstriction reflex, thereby causing increased capillary filling by closing down the AV shunts. Injection of the lumbar stellate ganglia and lumbar ganglia results in a temporary sympathectomy and should be used according to the sympathectomy above.

Low molecular weight dextran, vasodilating agents and corticosteroids have been shown to be of little value. If possible, amputation should be postponed at least 60 to 90 days so that an accurate demarcating line may be assured.

Asteatotic Eczema

Asteatotic eczema describes a skin which is erythematous, dry, wrinkled, often purpuric and fissured and which has a fine scale and a microvesicular eczema reaction, all as the result of drying. Pruritus, generalized discomfort and even pain are common. Children and the elderly are most susceptible during cold, dry weather.

The etiology is not fully determined. However, it is likely that asteatosis is due simply to decreased water content of the superficial skin layers associated with a disorganized lipid layer and reduced lipid content. Reduced lipid production in skin is seen in many children or in the elderly with prolonged illness or malnutrition or as a normal variation in some adults. Asteatosis tends to be aggravated suddenly by coolness. For example, severe pruritus may occur during undressing at night or be triggered by other brief changes in humidity or temperature. The problem tends to relapse each winter, improving promptly in the summer and usually clearing completely. It is made much worse by using soaps, detergents and any defatting solvents or by prolonged water immersion alone. To protect the skin, water must be bound to electrolytes and proteins in the stratum corneum. Extraction of electrolytes by water reduces natural protection. Increasing the bound-water in the skin cures the disorder.

The milder disorder, chapping of skin, always follows prolonged exposure to cold.[19] This injury is represented by a linear cracking and scaling of the stratum corneum and upper epidermis due to dehydration, but a sustained eczema does not evolve. Chapping is associated with a low temperature and a low dew point, but it is not related to relative humidity.[20] Acclimatization to cold is important to chapping, which appears promptly if one moves suddenly from a warm, moist region to a cool, dry area. It also is associated with too-frequent bathing, the wearing of woolens, injury by chemicals or trauma and previous disease.

Middleton[20] showed an increased extensibility of the stratum corneum of the guinea pig with increased temperature. This was not accounted for by an increased water content but probably was due to a direct effect of temperature. A low temperature results in a low extensibility of the stratum corneum and contributes to fragility and to the chapping process.

Asteatosis or chapping, also termed “winter itch,” is best treated with sufficient emollients to insure a well-hydrated skin. In the elderly, it is extremely important to fortify the skin against local injury which may allow infection. Almost all dry skin disorders can be benefitted by hydration.

Specifically, lubricants, such as eucerin, or other water-rich emulsions, such as unibase or acid mantle base, rubbed well into the skin four to six times daily will provide the required lubrication. The most common error is to apply too little ointment too seldom. A bath, adding rock salt (four cups per tub), or a tar bath or oil bath may be helpful. Sometimes an oral antihistamine such as hydroxyzine hydrochloride (Vistaril, Atarax), cyprohepladine hydrochloride (Periactin) and trimeprazine tartrate (Temaril) may be used initially to control itching.

Hyperhidrosis

The etiology of cold hyperhidrosis is largely unknown. It is undetermined if the hyperhidrosis is a cause or an effect of cold injury. The person may have been hyperhidrotic prior to frostbite and this may have been a factor in aggravating frostbite. A hyperhidrotic person is more likely to acquire frostbite.[21] Many cases of severe hyperhidrosis seeming to follow frostbite are known, and the cause is thought to be an injury to autonomic nerves.

Treatment of hyperhidrosis is generally unsatisfactory. Iontophoresis with water has been used in treating palms and soles. Systemic medications usually dry the mucosae much more than the skin. Cool environment, light clothing and ventilator shoes are helpful. Foot powder and, occasionally, antifungal preparations may be necessary.

Livedo Reticularis

A distinctive, mottled, blotchy-red discoloration of the skin of the legs is termed livedo reticularis. Often seen in healthy women and children, the disorder is due to an irregular distribution of blood through the cutaneous vessels. The appearance is accentuated by cold due to a decreased arterial blood supply with arteriolar constriction resulting in local hypoxia and associated with dilatation of venules and capillaries. Edema and hyperpigmentation may occur, but ulceration rarely occurs within the dark areas. Various terms used to describe similar patterns are cutis marmorata, livedo racemosa and livedo annularis. A family tendency exists.

Usually, the mild form persists without consequences other than that of being unsightly. The more severe form is distinguished by erosions, necrosis and greater inflammation.

The exact cause in many cases remains undetermined, but livedo also may be seen with Cushing's disease, tuberculosis, cryoglobulinemia and embolism with the various collagen diseases or after severe physical damage.

Treatment should be aimed at providing adequate skin lubrication to control drying and, also, adequate clothing and local heat to provide better superficial circulation. Diagnosis and specific treatment of underlying conditions are needed.

Benign Vasospastic Episodes and Other Mild Circulatory Problems

Transient benign vasospasm of the fingers is very common, especially in young women, but it is so mild that the problem never is brought to the physician. This mild form seems not to be linked to more serious underlying disease. During exposure to cold, a dull pain develops and the hands suddenly become unevenly ivory white, then blue, slightly swollen and, often, moist with sweat. The episode only occurs during cold exposure and typically involves only a part of the hand. It usually is fully relieved by warming the hands. These episodes may be induced for diagnosis by putting hands in ice water, but not always. In the mild form, there is seldom any residual damage or progression. These people may be said to have very mild Raynaud's phenomenon[22] and an excellent prognosis. Treatment consists of large, soft mittens rather than fashionable tight thin gloves. However, many patients should remain indoors during most cold weather, and some prefer to move south.

Summary

The treatment of those common and usually mild diseases caused by winter cold is summarized, with a review of our current knowledge of frostbite. Livedo reticularis, hyperhidrosis and the transient vasospasm disorders are not well explained in textbooks.

Direct cold damage to the cell occurs via intra- and extra-cellular ice crystal formation resulting in dehydration and drastic change in cell permeability. Other damage is the result of vascular changes, primarily vasoconstriction, leading to inadequate tissue perfusion. Both the direct cold effect and the indirect circulatory inadequacy are most important in determining the extent and type of injury.

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Reprints: *P. E. Hilton, M.D.*
Division of Dermatology
University of Missouri Medical Center
807 Stadium Rd.
Columbia, Mo. 65201

AHMED ELKADI, M.D., CARL ALMOND, M.D.,
ALAN HOPEMAN, M.D. ***and*** **EARL SIMMONS, M.D.,** ***Columbia***

Acute Traumatic Rupture of Major Intrathoracic Arteries in Traffic Accidents

Case Reports

In chest injuries sustained in automobile accidents, trauma to the intrathoracic great vessels is associated with the highest mortality. This paper presents a discussion of incidence of aortic rupture, etiological factors, clinical manifestations, diagnostic aids and surgical techniques involved in four cases of acute traumatic rupture of the thoracic aorta. A fifth case with false positive aortographic findings also is reported. The authors are from the Section of Thoracic and Cardiovascular Surgery, University of Missouri, where Doctor Elkadi is Assistant Professor, Doctor Almond is Professor and Chief of the Section, and Doctors Hopeman and Simmons are Associate Professors.

TRAUMA, resulting primarily from an automobile accident,[1] is now considered as the third most frequent cause of death in the United States and is preceded only by cardiovascular disease and cancer.[2] Fifty percent of the victims of fatal traffic accidents had multiple injuries, including a severe chest injury; in one half of these victims, the chest injury was the direct cause of death.[1–3]

With reference to chest injuries, trauma to the intrathoracic great vessels is associated with the highest mortality. Most of the victims die immediately due to exsanguination with only 10% to 15% surviving long enough to receive medical attention.[4–6] In the reported large series of vascular injuries during World War II,[7] the Korean War[8–11] and the Vietnam War,[12] the number of victims with injury to the intrathoracic great vessels was very small, i.e., 0.97% or 24/2471 for World War II, 1.1% or 5/453 for the Korean War and 1.1% or 11/1000 for the Vietnam War. These figures evidence the fact that most of the victims with intrathoracic great vessel injury exsanguinate shortly after trauma and before they can reach medical facilities. A similar incidence rate is noted in civilian practice. In a series of 265 penetrating and nonpenetrating chest injuries, there were four cases or 1.5% with great vessel injury.[13] Of 783 nonpenetrating chest injuries, only two cases or 0.26% had injury to the great vessels.[14] Other series, however, showed an incidence of 5% to 7%.[15, 16]

This paper reports four consecutive cases of acute traumatic rupture of the thoracic aorta seen at the University of Missouri Medical Center (UMMC) in Columbia during a one-year period from June, 1970 to June, 1971.

CASE REPORTS

The pertinent data on these patients are summarized in Table I.

Case # 1. A 58-year-old white man was involved in an automobile accident and sustained a steering wheel injury ten hours prior to admission to the University of Missouri Medical Center on June 14, 1970. Before being transferred to UMMC, the patient was seen at another hospital and his blood pressure was found to be 40 mm Hg systolic. Fluid replacement was started and the patient was sent to UMMC for further treatment. On admission, he was pale and cold. His blood pressure was 80/50 and the pulse rate was 92 beats per minute. There was a skin contusion over the left upper anterior chest wall and a fracture of the left clavicle. There also was tenderness of the left hip joint. All peripheral and neck pulses were equal without bruits. Heart sounds were loud without murmur. Chest x-ray revealed widened superior mediastinum. X-ray of the left hip joint revealed fracture of left acetabulum. Aortic rupture was suspected and retrograde aortogram was performed immediately. The aortogram showed a false aneurysm at the base of the innominate artery. In the meantime, blood and fluid replacement had been given and the blood pressure was maintained around 90/60 mm Hg.

TABLE 1

FOUR CASES OF ACUTE TRAUMATIC AORTIC RUPTURE

Case Number	*Sex & Age*	*Cause of Injury*	*Diagnosis*	*Operation*	*Type of Support*	*Outcome*
Case # 1 June 14, 1970	W M 58	Automobile accident	Laceration of aortic arch at posterior base of innominate artery	Division of innominate artery 2 cm distal to arch, repair of posterior tear, reanastomosis of innominate artery	External shunt between ascending aorta and distal innominate artery, partial clamping of arch	Recovered
Case # 2 Sept. 5, 1970	W F 17	Automobile accident	Transection of distal aortic arch just distal to left subclavian artery, and massive hemothorax and severe pulmonary contusion	Repair with graft	Left atrial-femoral bypass	Died (during operation, cardiac arrest, massive pulmonary capillary bleeding)
Case # 3 Nov. 20, 1970	W M 23	Automobile accident	Transection of descending aorta 2 cm distal to left subclavian artery	Repair with graft	Femoro-femoral bypass	Recovered
Case # 4 June 12, 1971	W M 26	Automobile accident	Avulsion of innominate artery	Bypass of lesion with aorto-innominate artery graft and suture closure of avulsion site	None (clamping of innominate artery for 15 minutes), partial clamping of arch	Recovered

Median sternotomy was performed about three hours after admission. The pump oxygenator was kept available in case cardio-pulmonary bypass should become necessary. There was a mediastinal hematoma without apparent active bleeding. The pericardium was opened and an external shunt was inserted between the proximal part of the ascending aorta and the distal part of the innominate artery. Proximal and distal control was obtained. Dissection revealed a laceration of the aortic arch at the posterior base of the innominate artery. Active bleeding during the dissection was controlled with finger compression. A partial occluding clamp was applied to the aortic arch and the innominate artery was cross-clamped. It was impossible to reach the posterior laceration for repair. The innominate artery, therefore, was divided about 2 cm distal to the arch and the proximal stump was rotated anteriorly. In this way, it was possible to perform the repair of the laceration with direct sutures followed by reanastomosis of the innominate artery stumps. The innominate artery was divided 2 cm distal to the arch instead of at the level of the laceration in order to have a better hold on the proximal stump in case the clamp had to be repositioned, which actually happened during the procedure.

Six hours after the operation, the chest had to be reopened to control bleeding from the suture line of the innominate artery. The postoperative course was otherwise uneventful except for a short transient episode of aphasia which occurred three weeks after the operation while the patient was on the orthopedic service for treatment of his fractures. Repeated aortogram showed the arch and its branches to be normal. There was, however, a small aneurysm, probably traumatic, of the left internal carotid artery at the base of the skull. As the location of the carotid aneurysm was almost inaccessible and the patient was asymptomatic, no therapeutic measures were undertaken. The patient is now without neurologic or vascular complications one year after the operation.

Case # 2. A 17-year-old white girl was admitted to UMMC on Sept. 5, 1970, approximately four hours following an automobile crash. On admission, she was conscious and had moderate respiratory distress. Blood pressure was 150/100 mm Hg in both upper extremities and 50 mm Hg systolic in both lower extremities. Pulse rate was 110 beats per minute. Carotid pulses were equal without bruits. Heart sounds were loud with a grade III/VI systolic murmur at the left sternal border in the second and

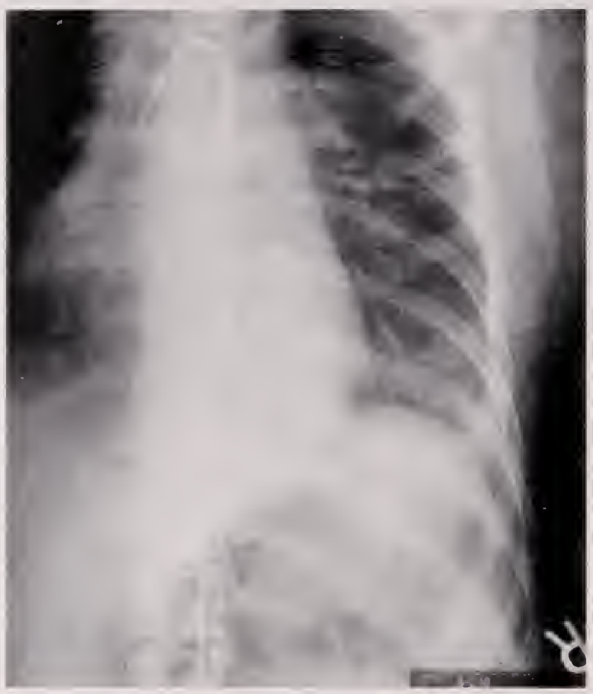

Fig. 1 Widened mediastinum (Case # 2).

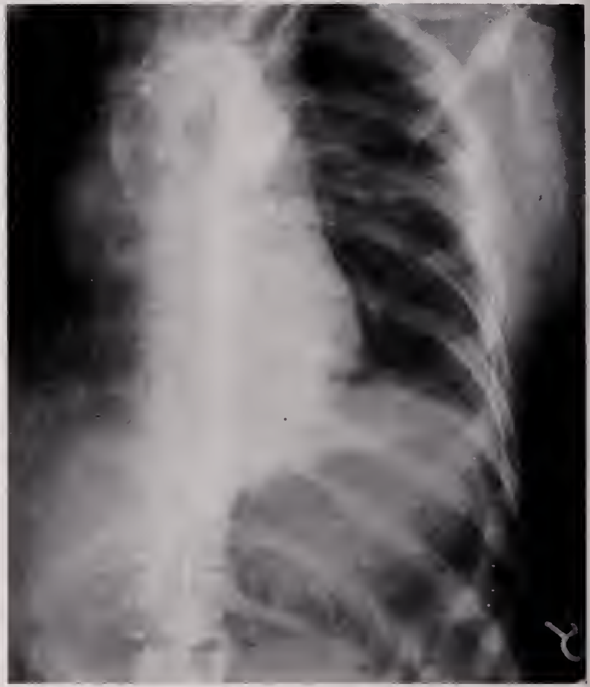

Fig. 2 Transection of aortic isthmus (Case # 2).

third intercostal spaces. The patient also had fractures of ribs, pelvis and left femur. Chest x-ray revealed widened superior mediastinum (Fig. 1). Aortography revealed transection of the aortic isthmus (Fig. 2).

Immediate left thoracotomy was performed. During induction of anesthesia, the blood pressure rose up to 200 mm Hg systolic for a few minutes and then fell to around 70 mm Hg. When the chest was opened, active bleeding from the transected aorta into the left pleural cavity was present. Bleeding was controlled and a left atrio-femoral bypass was started. Blood loss was adequately replaced. The ruptured segment was resected and replaced with a Teflon graft. During the operation, the patient developed massive pulmonary capillary bleeding, apparently due to severe pulmonary contusion. This was followed by cardiac arrest and all resuscitative measures were unsuccessful.

Case # 3. A 23-year-old white man was involved in an automobile accident 48 hours prior to admission to UMMC on Nov. 20, 1970. He sustained multiple facial fractures and bilateral malleolar fracture. Shortly after the accident, the patient was admitted to another hospital where an aortogram revealed transection of the aortic isthmus. The patient was transferred to UMMC for further treatment.

On admission, the patient was confused and irritable. Blood pressure was 120/70 and pulse rate was 100 beats per minute. All peripheral and neck pulses were equal without bruits. Heart sounds were clear. The abdomen was slightly tender and distended. The patient was taken to the operating room immediately and a left thoracotomy was performed. Simultaneously, the femoral artery and vein was exposed and cannulated for partial cardiopulmonary bypass. Exploration revealed transection of the aortic isthmus involving about 95% of the circumference. The intima and media were severed while the adventitia remained intact, preventing fatal hemorrhage. The ruptured segment was resected and replaced with a Teflon graft. The postoperative course was uneventful except for a moderate ileus, probably due to retroperitoneal hematoma, which responded well to conservative treatment. The patient returned to full normal activity.

Case # 4. A 26-year-old white man was admitted to UMMC on June 12, 1971, a few hours following an automobile crash. On admission, the patient was slightly confused and irritable with moderate respiratory distress. Blood pressure was 130/70 in the left arm and 60/40 in the right arm. All pulses of the right arm arteries were diminished. Heart sounds were loud with a systolic murmur at the upper sternal border. Chest x-ray revealed widened superior mediastinum (Fig. 3).

The aortogram revealed a false aneurysm at the base of the innominate artery with a translucent line between the aneurysm and the aortic arch (Fig. 4). Immediate median sternotomy was performed. A Teflon graft was anastomosed to the ascending aorta using a partial occluding clamp. Further dissection revealed a complete avulsion of the innominate artery with only the adventitia remaining intact and preventing fatal hemorrhage. A partial occluding clamp was applied to the aortic arch and the innominate artery was cross-clamped. The distal end of the Teflon graft was anastomosed to the distal

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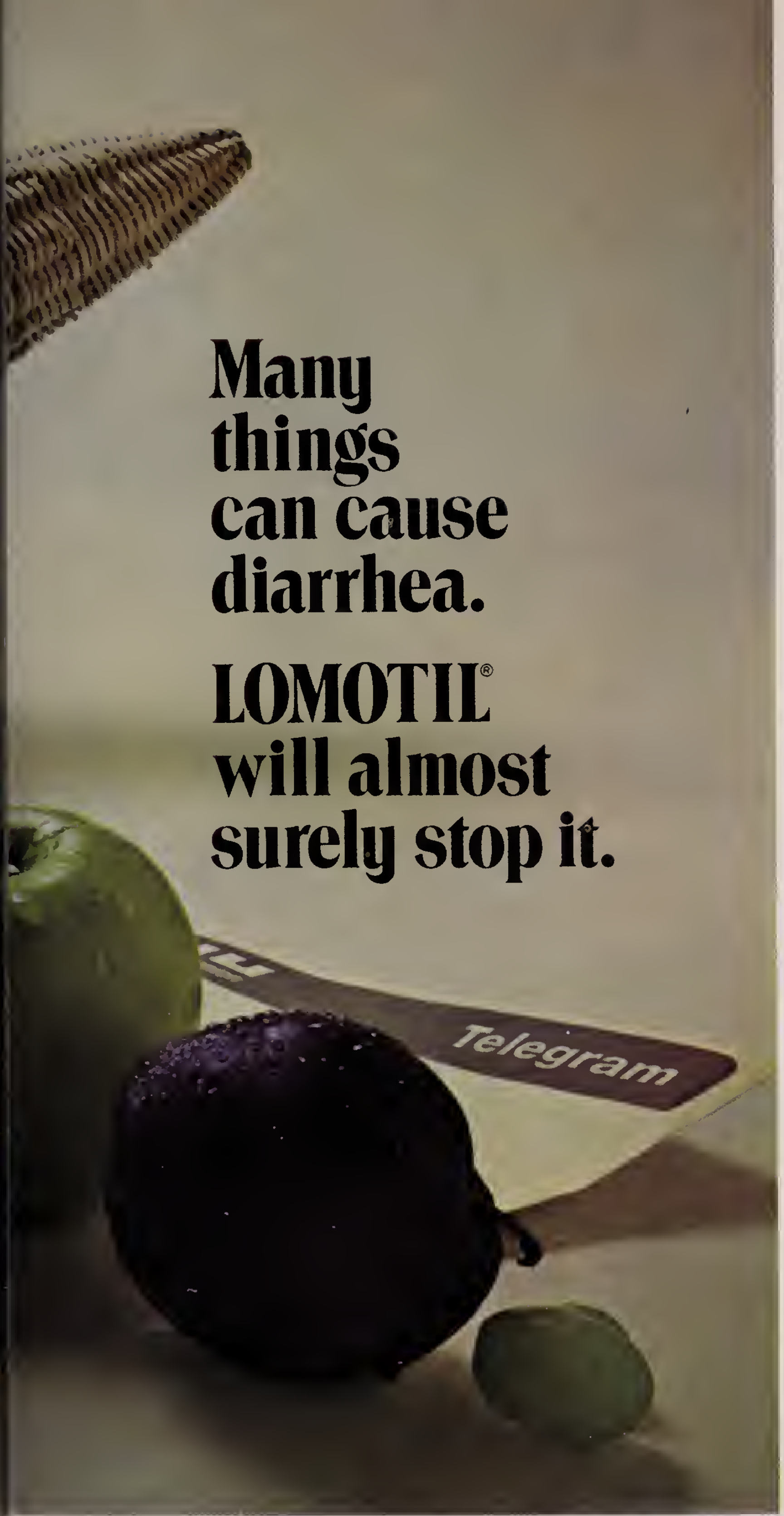
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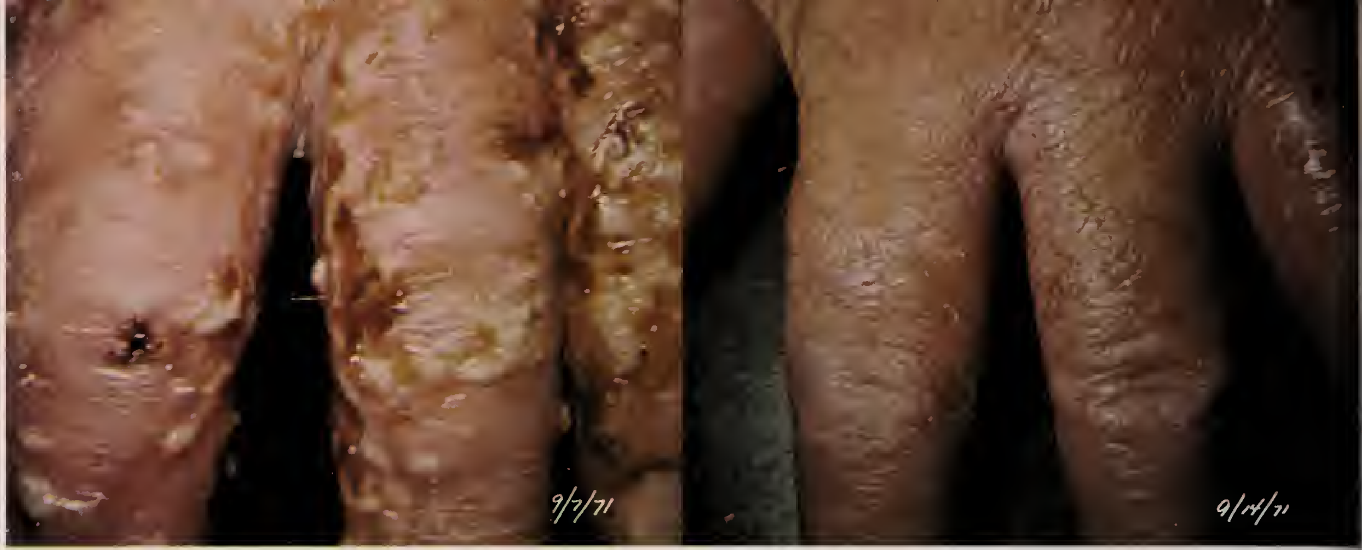

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Warnings: The use of tetracyclines during tooth development (last half of pregnancy, infancy and childhood to the age of 8 years) may cause permanent discoloration of the teeth (yellow-gray-brown). This is more common during long-term use but has been observed following repeated short-term courses. Enamel hypoplasia has also been reported. Tetracyclines, therefore, should not be used in this age group unless other drugs are not likely to be effective or are contraindicated. In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, use lower doses, and, in prolonged therapy, determine serum levels. Photosensitivity manifested by an exaggerated sunburn reaction has been observed in some individuals taking tetracyclines. Advise patients apt to be exposed to direct sunlight or ultraviolet light that such reaction can occur, and discontinue treatment at first evidence of skin erythema. Studies to date indicate that photosensitivity does not occur with MINOCIN Minocycline HCl. In patients with significantly impaired renal function, the antianabolic action of tetracycline may cause an increase in BUN, leading to azotemia, hyperphosphatemia, and acidosis. Pregnancy: In animal studies, tetracyclines cross the placenta, are found in fetal tissues, and can have toxic effects on the developing fetus (often related to retardation of skeletal development). Embryotoxicity has been noted in animals treated early in pregnancy. Safety of use during human pregnancy has not been established. *Newborns, infants and children:* All tetracyclines form a stable calcium complex in any bone-forming tissue. Prematures, given oral doses of 25 mg./kg. every 6 hours, demonstrated a decrease in fibula growth rate, reversible when drug was discontinued. Tetracyclines are present in the milk of lactating women who are taking a drug of this class. Safe use has not been established in children under 13.
Precautions: Use may result in overgrowth of nonsusceptible organisms, including fungi. If superinfection occurs, institute appropriate therapy. In venereal diseases when coexistent syphilis is suspected, darkfield examination should be done before treatment is started and blood serology repeated monthly for at least four months. Patients on anticoagulant therapy may require downward adjustment of such dosage. Test for organ system dysfunction (e.g., renal, hepatic and hemopoietic) in long-term use. Treat all Group A beta hemolytic streptococcal infections for at least 10 days. Avoid giving tetracycline in conjunction with penicillin.
Adverse Reactions: (Common to all tetracyclines, including MINOCIN) GI: (with both oral and parenteral use): anorexia, nausea, light-headedness, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in anogenital region. *Skin:* maculopapular and erythematous rashes. Exfoliative dermatitis (uncommon). Photosensitivity is discussed above ("Warnings"). *Renal toxicity:* rise in BUN, dose-related (see "Warnings"). *Hypersensitivity reactions:* urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus. When given in high doses, tetracyclines may produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur. In young infants, bulging fontanels have been reported following full therapeutic dosage, disappearing rapidly when drug was discontinued. *Blood:* hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
NOTE: *Concomitant therapy:* Antacids containing aluminum, calcium, or magnesium impair absorption; do not give to patients taking oral minocycline. Studies to date indicate that MINOCIN is not notably influenced by foods and dairy products.

***Indicated in infections due to susceptible organisms. Culture and sensitivity testing recommended. Tetracyclines are not the drugs of choice in the treatment of any staphylococcal infection.**
†Case Report, Clinical Investigation Department, Lederle Laboratories

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York 10965 436-2

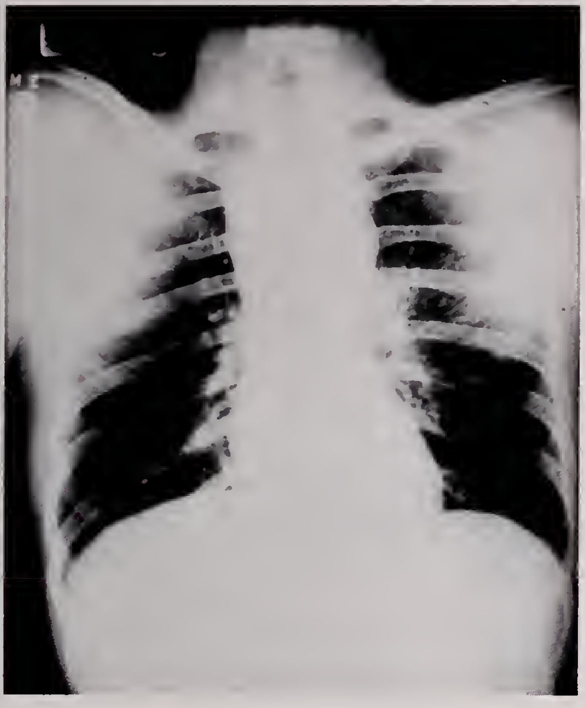

Fig. 3 Widened mediastinum (Case # 4).

part of the innominate artery. The stumps at the site of the avulsion were closed with sutures. The clamping time of the innominate artery was 15 minutes. Good back flow from the right carotid artery was present. The postoperative course was uneventful and the patient returned to full normal activity.

Case # 5. A 65-year-old white woman was admitted to UMMC on May 5, 1971, approximately ten hours following an automobile accident. On admission she was semicomatose, cold and pale, with an aramine drip which was started at another hospital. Blood pressure was 60/20 in both arms and pulse rate was 110 beats per minute with irregular cardiac rhythm. Heart sounds were clear. The abdomen was tender and distended with muscle guarding in the left hypochondrium. Chest x-ray revealed widened superior mediastinum (Fig. 5).

Aortogram was performed immediately and revealed what appeared to be laceration of the aortic isthmus (Fig. 6). The abdominal phase of the aortogram showed extravasation of contrast medium from the splenic artery (Fig. 7). EKG showed signs of acute myocardial infarction, probably due to severe myocardial contusion.

Following initial resuscitation, the patient was taken to the operating room and laparotomy was first performed. A ruptured spleen was removed and the patient was turned on her side for left thoracotomy. Exploration revealed moderate mediastinal hematoma without apparent active bleeding. Left atrio-femoral bypass was started and the aortic isthmus was dissected. Aortotomy was performed and the suspected area examined. The only abnormal

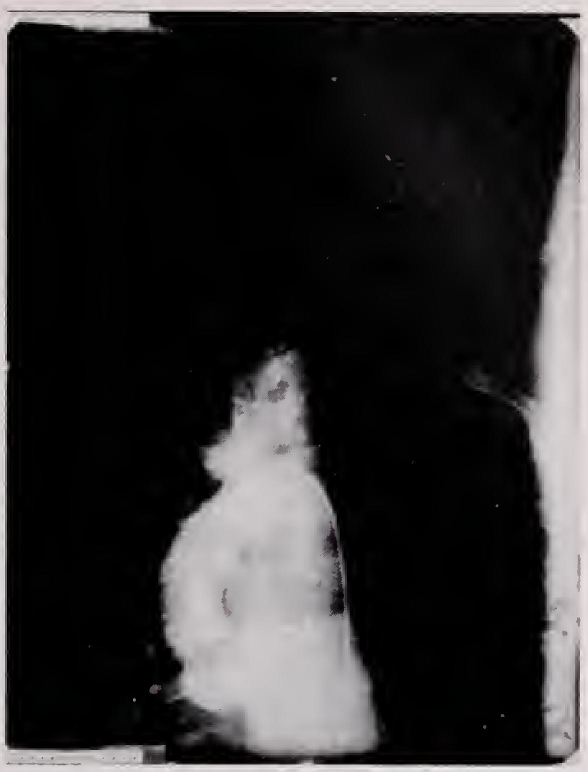

Fig. 4 Avulsion of innominate artery (Case # 4).

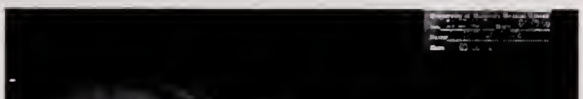

Fig. 5 Cardiac contusion and mediastinal hematoma (Case # 5).

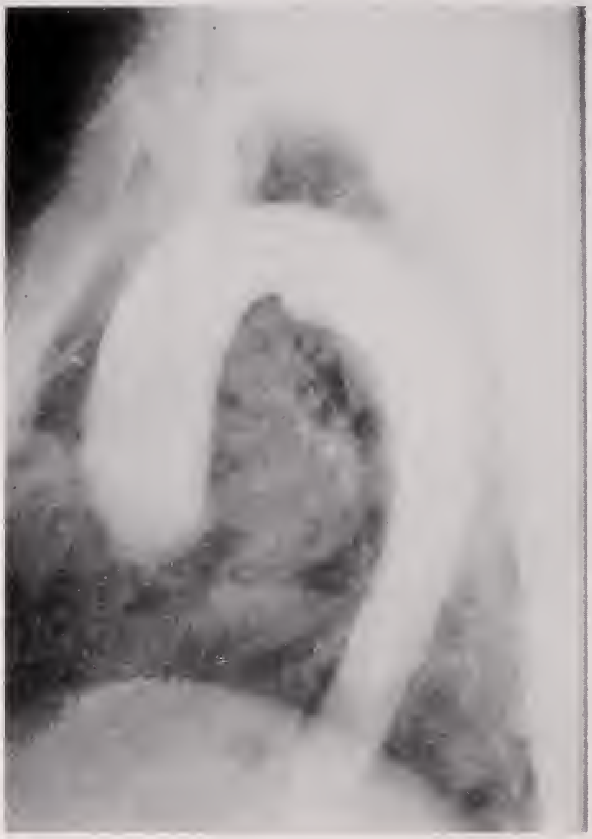

Fig. 6 Aortogram of patient with cardiac contusion and mediastinal hematoma, thought to have aortic laceration (Case # 5).

finding was a slightly elevated atheromatous plaque, which, in addition to tortuosity of the aorta, apparently contributed to the abnormal arteriographic appearance. The intimal plaque was tagged down with several sutures and the aortotomy was closed without complication. This case did not present an actual aortic rupture as was indicated by false positive arteriographic findings.

Discussion

Of the 10% to 15% who survive traumatic aortic rupture, a few patients will live long enough to develop chronic traumatic (or false) aneurysm. Survival for as long as 37 years has been reported.[6] However, most of the patients who reach the hospital resume bleeding and exsanguinate during the first few hours or days.[5] Prompt diagnosis and surgical treatment are mandatory. It must be emphasized that in 36% of patients with aortic rupture, minimal or no external evidence of injury is present.[5, 6] A history of crushing chest injury in combination with rapid deceleration should alert the physician to the possibility of aortic rupture.

The presence of massive rib fracture, especially if the first rib is involved, and the presence of a dorso-lumbar vertebral fracture in combination with a crushing or deceleration trauma should point to the possibility of aortic rupture.[5] Widened superior mediastinum on x-ray is the most common radiologic feature which should suggest aortic rupture.[5, 17–19] However, it also may be present without injury to the great vessels.[18, 19] The same applies to hemothorax or deviation of trachea to the right or both which also are found in many patients with aortic rupture.[5, 18, 19]

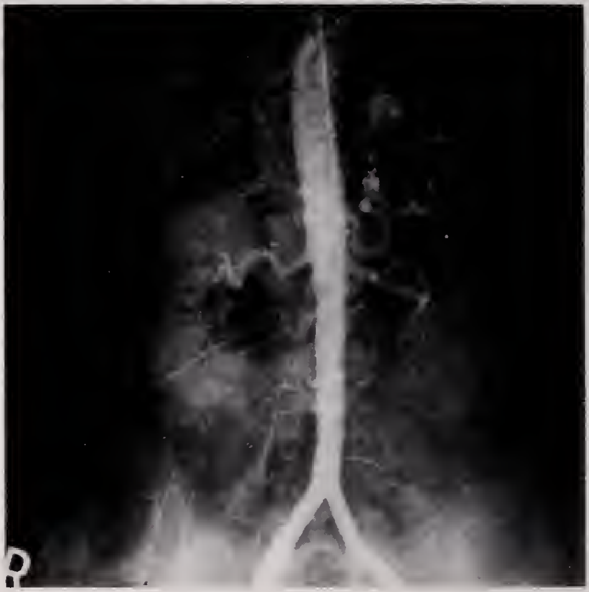

Fig. 7 Ruptured spleen (Case # 5).

The mechanical factors leading to rupture in traffic accidents are probably a combination of the impact of external force and the effect of rapid deceleration. The concept of deceleration is based on the assumption that the heart, the ascending aorta, the aortic arch and the descending thoracic aorta decelerate at different rates due to their different location and attachments. Areas subjected to greatest strain are at the points of junction of these differentially decelerated structures.[20] It was noted, however, that the impact of external force, usually associated with traffic accidents, leads to posterior displacement of the heart and proximal aortic arch with resulting flexion and elongation of the blood filled aorta. This leads to maximal strain at the convexity of the aorta proximal and distal to the arch, and it is here that most tears occur.[21] The latter mechanism was confirmed experimentally utilizing a system simulating steering wheel injury.[22]

The most common clinical manifestation is shock or evidence of blood loss. Hypertension, however, may develop during the first 24 hours following the injury in otherwise normotensive patients.[23] The combination of hypertension in the upper extremities, weak pulses in the lower extremities and the presence of a systolic murmur over the left precordium sometimes called the "coarctation syndrome," is attributed to compression of the thoracic aorta by the increasing mediastinal hematoma[24] or to aortic spasm at the site of injury.[25] This syndrome was present in Case # 2. Pain, dyspnea, dysphagia, hoarseness or signs of superior vena caval obstruction may all be caused by the increasing mediastinal dissection or compression of mediastinal structures by the developing hematoma.[26] All of the above symptoms also can be caused by other intra- and extrathoracic injuries not involving the great vessels. On the other hand, patients with aortic rupture may remain relatively asymptomatic until the traumatic aneurysm is discovered years later.

Whenever aortic rupture is suspected, immediate aortography should be performed in order to confirm the diagnosis and locate the site of rupture.[18] However, evidence of continuous massive blood loss and continuous deterioration of the patient's condition necessitates immediate surgical intervention as a part of the resuscitation without the angiographic studies.[27]

The arteriographic appearance will vary, including any of the following: slight irregularity of the aortic wall; a small filling defect due to elevation of intimal flap; visualization of a false aneurysm; visualization of the completely or incompletely transected aortic stumps with a translucent line in between.[17–19] Occasionally, extravasation of the contrast medium is seen. Although arteriography is usually accurate in establishing the diagnosis of aortic rupture, there can be false positive arteriographic findings. This was the case in Patient # 5 who did not have aortic rupture as suggested by the aortogram. Apparent irregularities of the aortic wall can be due to tortuosity of the aorta or to the presence of thick atheromatous plaques in the aortic wall. In such cases in which aortic rupture is suspected but the evidence is questionable, it is recommended to explore the aorta and, if necessary, to perform an exploratory aortotomy.

The sites of lesions in a series of 275 cases of aortic rupture with 273 of them being necropsy material, were as follows:[5] ascending aorta, 23.6%; aortic arch, 8%; aortic isthmus, 45%; descending aorta, 12.7%; abdominal aorta, 4.7%; and multiple sites, 6%. In a collective review of 110 cases undergoing surgical repair, the site of rupture was at the isthmus.[26] The explanation of different distribution is that most patients with rupture of the ascending aorta die immediately after injury, not surviving long enough to be operated on. Therefore they are not included in most surgical series. Complete transection is more common than partial tear[5, 6] and, in surviving patients, the laceration is usually limited to the intima and media while the intact adventitia prevents free hemorrhage and exsanguination.

A variety of surgical techniques was used in these reported cases; the choice of approach depended on the site and extent of the injury. When the procedure required cross-clamping of the aorta, the circulation to the distal part of the body was secured by means of partial bypass or an external shunt. Although it has been proposed that cross-clamping of the aorta for periods of less than 20 to 30 minutes was safe,[28, 29] a case of paraplegia was reported[30] after aortic cross-clamping for two periods of ten and 15 minutes. Left atrio-femoral bypass has been recommended and is still the most commonly used technique.[31, 32] Two cases of paraplegia also were reported in patients who underwent repair of aortic rupture using left atrio-femoral bypass technique.[27] Whether the paraplegia in the above-mentioned cases was due to preoperative damage caused by the primary injury remains undetermined.[27, 30]

Partial cardiopulmonary bypass using the femoro-femoral bypass technique[33] seems to have several advantages: cannulation of the patient with the bypass ready before the chest is opened, avoidance of manipulation of the heart and elimination of tubing in the operative field. Recently, more cases were reported in which external shunt without pump was used with good results.[30, 34, 35] In our reported cases, the above-mentioned techniques were applied, depending on the clinical situation and anatomical location of the lesion. Results are reported in several series with mortality ranging from 100% to zero. Table 2 shows some of the reported results.

SUMMARY

Four cases of acute traumatic rupture of the thoracic aorta following traffic accidents are reported. The site of rupture was at the aortic isthmus in two cases and at the base of the innominate artery in the others. The diagnosis was confirmed by aortogram, and surgical repair was performed immediately in all cases. One of the

TABLE 2

NON-PENETRATING INJURIES OF THORACIC AORTA—MORTALITY

Author	*No. of Patients*	*Patients Died*	*Mortality %*
Schramel *et al*[13] 1961	2	2	100
Jahnke *et al*[36] 1964	6	0	0
Lipchik & Robinson[37] 1968	3	2	67
Thomford *et al*[38] 1969	8	6	75
Richardson *et al*[39] 1969	9	5	56
Mulder & Grollman[40] 1969	9	1	11
Beall *et al*[27] 1969	5	0	0
	2 had paraplegia		
Rittenhouse *et al*[26] 1969	5	0	0

four patients died during the operation due to severe pulmonary contusion and massive pulmonary capillary bleeding. A fifth case with false positive aortographic findings also is reported. Incidence of aortic rupture, etiological factors, clinical manifestations, diagnostic aids and surgical techniques are discussed.

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Reprints: Section of Thoracic and
Cardiovascular Surgery
University of Missouri
Columbia, Mo. 65201

BART F. WOOLDRIDGE, M.D. *and*
CHARLES H. BENTLAGE, M.D., *Joplin*

Gastrocolic Fistula Secondary to Benign Gastric Ulcer

GASTROCOLIC FISTULAE from any cause are uncommon. Those arising from a benign gastric ulcer have been rarely reported. A review of recent literature revealed only 38 cases that have been described since the original recognition of this fistula as a clinical syndrome in 1755.[1-5] The rarity of the condition has prompted a review of the pertinent literature and this report of a recently encountered case.

CASE REPORT

A 33-year-old, white housewife presented herself with a one-week history of progressive nausea, vomiting and associated diarrhea. She had vomited bright blood on at least one occasion and had noted marked lethargy and weakness. During the preceding 12 months, she had experienced intermittent, burning epigastric pain, mild progressive weight loss of 15 lb and anorexia. She also had noted irregularity in her bowel habits, with some diarrhea and, on several occasions, tarry stools.

Her past history was unremarkable except for two cesarean sections. Her family history indicated that her father had died of a brain tumor five years previously.

Physical examination showed moderate dehydration and evidence of recent weight loss. She evidenced considerable tenderness over the upper abdomen and complained of some midback pain with pressure over the epigastrium.

Pertinent laboratory data indicated, on admission, a hemoglobin value of 5.9 gm/100 ml and a hematocrit reading of 19.5%. Two stool examinations were positive for traces of occult blood. Total serum protein value was 5.3 gm/100 ml with an albumin reading of 2.2 gm/100 ml. Chest x-rays revealed mild emphysematous changes. Upper gastrointestinal (GI) x-rays revealed a large fistula between the greater curvature of the stomach and the mid-transverse colon. Polypoid changes of the gastric mucosa were noted, and deformity of the distal pyloric canal was evident (Figs. 1 & 2).

It was felt that she had polypoid malignancy of the stomach with colon fistulization. Mechanical and antibacterial preparation of the colon was instituted, and whole blood and serum albumin concentrate were administered intravenously, preoperatively.

At laparotomy, a large posterior and inferior gastric ulcer with fistulization involvement of the mid-transverse colon was encountered.

En bloc subtotal gastric resection with resection

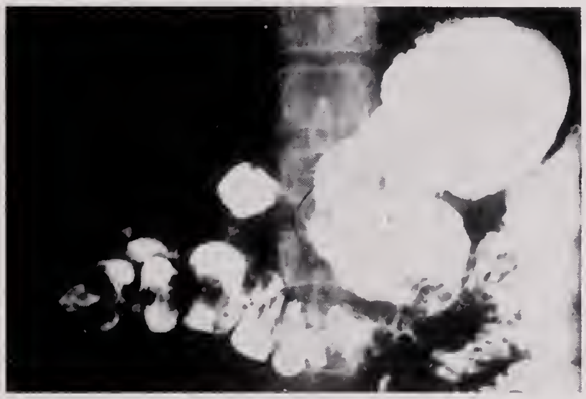

Fig. 1 Large gastrocolic fistula with prompt barium fill up of the transverse colon.

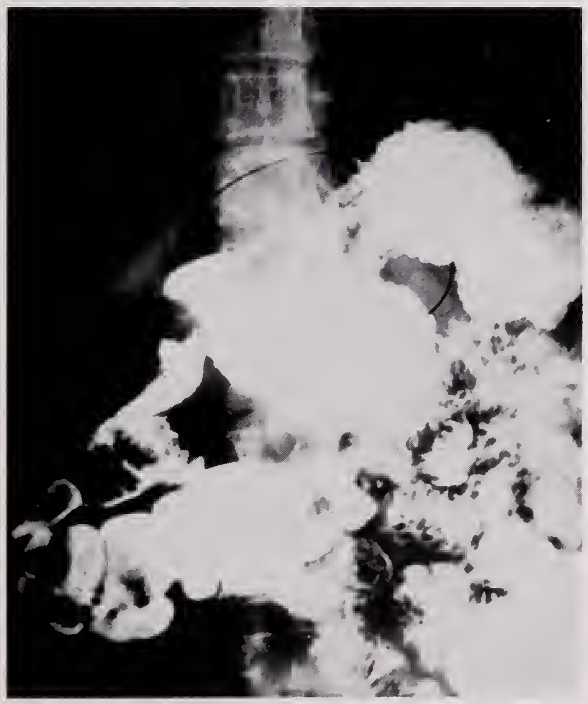

Fig. 2 Polypoid appearance of folds of stomach in area of fistula and narrowing of antral area.

This is a report of a recently encountered case of gastrocolic fistula secondary to benign gastric ulcer in a patient without previous operative procedures. The condition is uncommon. The authors review its symptomatology and management. Doctors Wooldridge and Bentlage are in the private practice of surgery.

of the mid-transverse colon was carried out. Intestinal continuity was reestablished by end-to-end colon anastomosis and an anticolic gastrojejunostomy (Fig. 3).

Pathological study revealed the gastric ulcer to measure 5 cm in diameter and to be of the peptic type. The colon fistula was surrounded by dense scarring and inflammatory reaction. No neoplastic change or colon diverticular disease was noted. Her postoperative course was uneventful and subsequent outpatient follow-up has revealed progressive weight gain and no further digestive complaints.

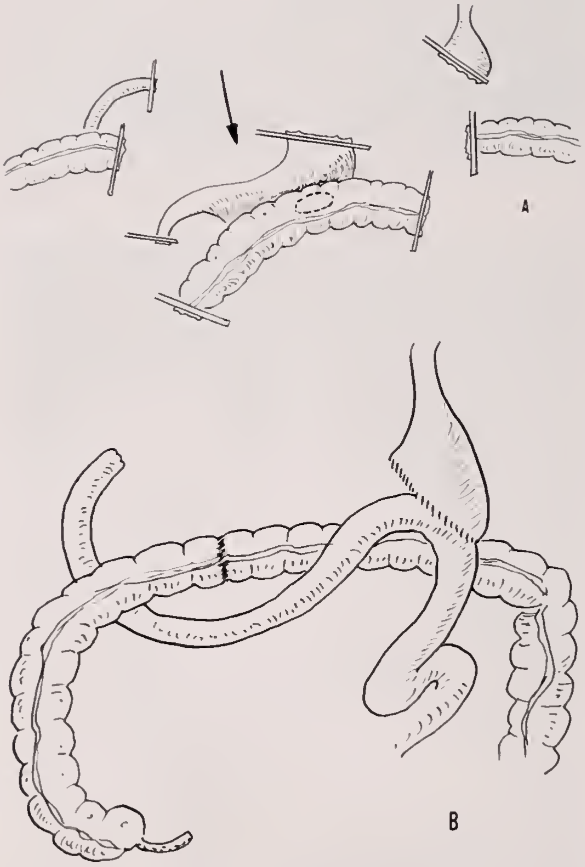

Fig. 3 Technical steps in resection of fistula. (A) Colon clamped and removed with stomach en bloc. (B) Final reconstruction. Anticolic gastrojejunostomy; Hoffmeister type.

COMMENT

Gastrocolic fistulae resulting from benign peptic ulcer disease in patients without previous operative procedures are uncommonly encountered. Neoplastic disease is reportedly the most common cause of gastrocolic fistula.[6] Marshall and Knud-Hansen[7] found that 0.5% of patients with gastric and colon carcinomas developed this complication. Other causes are rare, but include inflammatory disease (diverticulitis, ulcerative colitis, Chron's Disease, syphilis and tuberculosis),[8] other tumors of the large bowel (mostly carcinoids),[9] benign gastric ulcers and trauma.[10] One neonatal gastrocolic fistula has been reported.[11]

Of 15 reported cases of benign ulcer producing gastrocolic fistula reviewed by Fishman[2] in 1970, five were steroid induced. Dyspepsia and diarrhea were noted in all these cases, and other prominent symptoms included weight loss, abdominal pain, nausea, foul eructations and vomiting. The fistulae have been demonstrated in most all reported cases by barium enema or upper GI x-ray studies. Some radiologists feel the pressure differential in the barium enema renders this study more likely to demonstrate the fistula than the upper GI series[12] (95% accuracy as compared to 27%).

The one-stage operative procedure originally advocated by Marshall[6] for en bloc resection of the distal stomach and mid-transverse colon has been most frequently employed since 1940, as contrasted to the two-stage procedure advised by Pfeiffer and Kent[13] and by Lahey.[14] These staged procedures consisted of a preliminary colostomy proximal to the fistual area or an ileo descending colostomy followed later by definitive gastric colon resection. Present-day understanding of the pathophysiology of the disease, preoperative bowel preparation, correction of anemia and fluid and electrolyte disturbances and progress in antibiotic therapy have made the one-stage procedure feasible.

SUMMARY

A case report of gastrocolic fistula secondary to benign gastric ulcer is presented. A one-stage procedure consisting of en bloc resection of the fistula with distal subtotal gastrectomy and partial colectomy was done with favorable outcome. The pertinent literature concerning the frequen-

(Continued on page 42)

HENRY K. SILBERMAN, M.D., ***Richmond, Va.***

Appointment With Death

Attitudes and Communications

The subject of death holds a certain fascination which mixes curiosity with revulsion, sometimes fear with hesitant expectation and, although a reality, it is not always present in everyone's mind. Traditionally, this subject has been one of the major concerns of religion and its institutional representatives, whereas the preservation of life has been the prime responsibility of the physician. Indeed, death almost symbolized the failure of the physician's efforts. Schopenhauer's remark that the fear of death was the beginning of philosophy and the cause of religion probably overstated the issue. There are other mysteries in our existence which have led man to seek answers and solace in superior or supreme beings in an attempt to come to terms with problems of his existence. Man presumably is the only animal aware of his mortality. Yet, we do not dwell on this even in moments of great distress or catastrophe. We are likely to consider a person to be sick if he continually ruminates about death and entertains thoughts of dying. But, there are moments in life when the thought of death enters the awareness of the average person and fear arises within him.

Montaigne[1] said, "The end of our race is death; 'tis the necessary object of our aim which if it frights us, how is it possible to advance a step without a fit of ague? The remedy the vulgar use is not to think on't; but from what brutish stupidity can they derive so gross a blindness? . . . Let us disarm death of his novelty and strangeness, let us converse and be familiar with him and have nothing so frequent in our thoughts as death." On the other hand, Spinoza holds in his *Ethics,* "A free man thinks of death least of all things; and wisdom is a meditation not of death, but of life." Between these two poles, we can find almost any type of opinion, and nothing seems easier than to obtain quotes concerning death from the great intellects supporting one or the other attitude or, perhaps, even several at the same time. Age, stress and emotional upheaval alter ideas relating to death. We may question the statement concerning man's unique position in the animal kingdom in connection with his awareness of mortality, because nobody has ever interviewed an animal. In observing animal behavior under mortal stress, however, there is little doubt about their reactions, their fears, their attempts to escape possible destruction. After all, this is just about what man does, other than to philosophize about the impermanence of life and to attempt to ward off the inevitable.

Until not too many years ago, the subject of death and, certainly, the physician's responsibility in preparing a patient for this inevitable event was almost proscribed in medical literature. Only a few courageous teachers in medical schools dared approach the subject in lectures or conferences with medical students, and they usually limited their discussions to the simple question, "To tell or not to tell?" Even then, opinions were sharply divided and only the rare individual would go on to the question of "How to tell?"

Pertinent books and articles began to appear approximately 12 years ago and led to an avalanche of publications in the last three or four years culminating in a feature story in a popular weekly magazine, which nowadays denotes a stamp of social approval. I am not sure how this development came about except, perhaps, as a reaction to exaggerated expectations from medical progress which tended to make death less of a reality than it had been in times past. The Middle Ages, especially in 14th and 15th Century Europe, were intensely preoccupied with death as an ever-present companion, and the Apocalyptic Horsemen swept through art, literature and in their realistic form through the daily life of the populace. In stark contrast, our era has come to expect life as a right, and we have relegated death very neatly into some corner under the care of specially self-appointed minions whose major goal is to make death even look like life. We have done our very best to deny the existence of death and protect the living not only from any awareness of its inevitability, but, also, of its genuine appearance. By substituting instrumental values for institutional sanctions we have mechanized it.

The fatally ill are removed from their loved ones and their familiar environment and are forced to end their lives in the perhaps competent but exceedingly sterile and unemotional environment of a hospital. The ostensible reason, of course, is that hospitals are equipped for the support and prolongation of life while the average home is not. In our pragmatic way of thinking, such reasoning is applied without distinction or discrimination, that is, regardless of whether the patient suffers from an illness that calls for vigorous life-restoring treatment or whether treatment simply implies a few hours or a few more days of agony. Moreover, to make matters worse, the individual affected is rarely consulted concerning his or her own wishes. In short, it is simply taken for granted that everybody wants to live a little longer. American civilization takes pride in the belief that nothing is unattainable, not even the conquest of death. Strangely enough, it is far less preoccupied with the attainment of sensible, meaningful life.

Socially conscious members of the medical profession, as well as associated disciplines, began to worry about this attitude which takes biological life for granted and considers death almost as a misadventure because it placed a heavy burden on the shoulders of the responsible caretakers. As in other areas of social concern, psychiatrists became deeply involved and were expected to provide some answers although the psychiatrist encounters death far less frequently in his daily clinical activities than other physicians. Another development which brought the problem of life and death into sharper focus was the introduction of new, highly sophisticated and very expensive treatment methods which confronted the physician with the awesome dilemma of who should live and who should die. This includes the entire area of organ transplants, artificial organs, certain perfusion techniques and treatment with drugs of considerable toxicity. Finally, to complicate matters further, death itself was questioned and became a serious medical and legal as well as theological problem.

A first step toward alleviating the problem was to examine and define attitudes towards death. One may question whether they are not simply of academic concern and, perhaps, of interest to the philosopher, the historian or the theologian? Some publications seem to convey the impression that if one follows a certain prescribed course in the management of the dying patient, one is bound to relieve suffering and provide solace. This is a rather simplistic approach which fails to account for individual differences and leads to the danger of ignoring certain mores, rituals, cultural sanctions and a variety of other factors. Unless we know and respect social and cultural forces and the attitudes which they generate in the individual, we are poorly prepared to deal with the person's hopes, fears and expectations.

In general, attitudes towards death have undergone changes in recent times. However, it is not clear if this phenomenon is the result of cultural transformations or if culture reflects changes in experience of the unconscious mind. Anxiety continues to be present in everyone and is usually managed in a protective system which functions well until existence itself is threatened. Such protective systems change with time and find sanction or disapproval in the social ambient. Although the nature and meaning of anxiety have been investigated by practically all schools of psychology and philosophy with diverse results, I feel that the existentialist approach may be pertinent for the encounter with death. Tillich[2] defines the concept as follows: "The first assertion about the nature of anxiety is this: Anxiety is the state in which a being is aware of its possible nonbeing. It is not the abstract knowledge of nonbeing which produces anxiety, but the awareness that nonbeing is part of one's own being. It is not the realization of universal transitoriness, not even the experience of the death of others, but the impression of these events and the always latent awareness of our own having to die that produces anxiety."

As a general definition of anxiety, this formulation is undoubtedly insufficient and opens many questions. However, in the context of a specific discussion of death and the fear of dying, it seems to have more meaning than, for instance, Freud's concept of a death instinct. Regardless of the nature of the phenomenon of anxiety, we have to accept the fact that the thought of death generates fears, the nature of which varies from century to century, from society to society, from family to family, from one individual to the next. If death is no longer the ever-present reality that we described for the Middle Ages, we are still faced with constant reminders on different levels of awareness and sensitivity. It may be an impersonal experience, such as the death of some public figure, a natural or technological disaster, war time casualties or similar catastrophic events. It may be on an interpersonal level, such as a death of friends or close or remote acquaintances. Finally, it can be on the highly personal level, such as in the death of a member of one's family, which is most likely to generate strong feelings within us. The reaction to the latter experience will be largely conditioned by the character of the relationship and will increase in intensity if this relationship was not clearly defined and, perhaps, consisted of a mixture of love and hate. Such conflict-ridden situations provoke coping maneuvers to help conquer intolerable physiological and psychological distress. The defense mechanisms at our disposal are largely designed to deal with the emotional impact of personal experiences and memories, but we have no personal memory for death.

Death, in psychoanalytic terms, has no archaic infantile representation. Therefore, we conceive of it mostly in terms of separation, i.e., the impression created by the death of others. The French have a saying, "To leave is to die a little," which equates separation with dying. In a childlike manner, we feel that it is not we who die and leave everybody else behind, but we rather conceptualize that the others, the entire world, friends and families desert and reject us. Hence, we experience the terrors of loneliness and isolation. Life would be intolerable with such constant awareness and, therefore, we have surrounded ourselves as individuals and society with all sorts of magical stratagems. We strive to deny death by not talking about it, because this may precipitate it. We are reluctant to prepare for it, purchase "life" insurance and not "death" insurance and avoid making out wills.

On a national level, we depersonalize death with the aid of the news media. One possible exception is survivors of sudden-death situations who allegedly describe no fear at the ultimate moment but, rather, pleasurable sensations, memories etc. This may be an attempt by the Ego at mastery of the current situation. Survivors of lingering catastrophic events, on the other hand, describe initial fear which is later replaced by a feeling of invulnerability. However, relatively few persons have had such experiences and the vast majority have to fashion its own concept.

In general, mankind has tried to reduce fear of death in two ways: (1) Through emphasis on the importance of earthly life or (2) through emphasis on an afterlife. The latter attitude usually implies that certain desirable, conforming behavior in one's lifetime insures considerable rewards in the hereafter. A variation on this particular theme, of course, is the doctrine of transmigration of souls, which placed reward and punishment for one's behavior not into some ill-defined location but right here on earth, and which not only determines one's future but explains even present fate on the basis of one's behavior in a past life. The question has been posed whether religious dogma actually affects the fear of death and whether there is a difference in attitudes between a believer and a nonbeliever. Perhaps, it is not true that one is less afraid because one is a believer, but rather that one is a believer because of one's fears. Today's social climate presents serious problems for true believers unless they happen to live in an appropriate cultural environment. Otherwise, they may encounter skepticism and, perhaps, analysis of their motives.

"How to tell?" This author reviews philosophical viewpoints about dying with some examples of practical applications in clinical medicine. While he states that there is no universal formula for communication with the fatally ill, he suggests that observation of behavior and interaction with significant family members can help in selecting the most appropriate method. He attempts to bring into focus the nature of the fear of death and offers four basic rules for communication. Doctor Silberman was Associate Professor of Psychiatry at the University of Missouri School of Medicine at the time this paper was written. He is now Director of the Psychiatric Outpatient Clinic at Virginia Commonwealth University.

As already mentioned, our civilization has placed many taboos on references to death by surrounding it with euphemisms, magical attitudes, counterphobic devices and similar stratagems. Some say that we are not so much afraid of death as of dying, meaning suffering, disfigurement, loss of identity and helplessness. People may express preference for a sudden death, but also reserve judgment by adding that it is harder on the survivors. Regardless of opinions expressed in times of health, attitudes undergo remarkable changes when the individual is faced with the fact of a fatal illness. Of course, much depends on the person's customary way of dealing with stresses. But even the most poised and presumably well-adjusted individual will fall back on less rational and less mature adjustment mechanisms. Moreover, these will shift in the course of the illness, and circumspection is certainly indicated.

There is no universal recipe for communication with the fatally ill. In addition to the afflicted person, we must consider the family members as well as the personality of the physician. There is frequently a sort of family culture which governs family relations in times of stress and which may lend support to the suffering member. It also may become highly destructive, unless it is recognized as such and speedily dealt with. By this, I do not mean that we should impose our own concepts which may be quite alien and only help to confuse the issue. By closely observing behavior and interaction of significant family members, one can then select the most appropriate method for communication. Most importantly, one must watch one's language. There are terms charged with emotional meanings, such as the word "cancer" or its synonyms, which are the equivalent of a death sentence in the mind of many lay persons. The term "stroke" may be equally risky. Far more serious illnesses may be accepted with equanimity because they lack the emotional impact which socially stigmatized terms confer.

In terms of overt behavior of the patient, some observers distinguished so-called negative and positive attitudes. Among the former are listed indifference, fear, protest, contempt, envy of the living, despair, shame and stigma. Positive attitudes include courage, stoicism, heroism, surge of creativity and, occasionally, even glorification of death. Such value judgment is largely in the eye of the beholder and does not really reflect the individual's true feelings. Attitudes also do not exist in isolation, but are intertwined and undergo frequent changes related to the course of the illness, incidental experiences and environmental influences.

The feelings of the caretakers play an important part in this system of communication. Not every physician has the capacity for effective communication with the fatally ill patient. Students and young physicians have an especially tough time. They like to think of themselves as healers and often cannot tolerate the thought that all their efforts have been or will be in vain. The hospital setting itself provides little support and, indeed, may directly or indirectly impart negative messages. Transfer of a patient to a special room, fewer visits by physicians on their rounds, more hurried ministrations by nurses, whispered communications and other changes in behavior become ominous signs to the sick person. But they also set a pattern for the medical student who accepts them as routines and who, if he does question them, may receive a rationalized answer. Unless students and house staff are given an opportunity to discuss these problems, to learn to accept the more unpleasant aspects of their calling and to make constructive use of their early sensitivity, they will suffer serious conflicts later on.

A second-year medical student reported to me on the interview and examination of an elderly lady suffering from leukemia. A very thorough medical history and a good physical examination had been accomplished, but at no time had the meaning of the illness been talked over with the patient. When I suggested that this approach might be indicated, the student became irritated blurting out, "Why must you stir up trouble? She seemed perfectly happy the way she was." The student had completely ignored the fact that, in spite of the alleged contentment, the lady had consulted numerous doctors between her home in Florida and Missouri, where she was visiting her daughter. One of her complaints was that "nobody tells me anything" and that she had to make important decisions in the near future. The student also ignored the choices of communication available to her and could only think in terms of some definitive message, such as that the patient had cancer and that her life span was extremely limited. She also minimized the patient's knowledge of her condition.

Most patients know that they have a fatal illness, but they may hesitate to talk about it out of consideration for the family. Thus, one often witnesses the tragic spectacle of an entire family suffering because the members wish to "spare" each other's feelings. Our task is not to help patients die, but rather help them live the allotted time remaining. But let us not specify that time because nothing shatters self-esteem or destroys confidence like seeing a patient whom we had told a couple of years earlier that he had only a few more months to live.

The statement, "Nobody tells me anything," is equally fraught with pitfalls. Man, in general, has considerable capacity for selective inattention especially when bad news is involved. We so often feel frustrated to hear a patient ask questions which we believe we have explained time and time again. Yet, all he wishes is to share his feelings and his experiences with another human being or he secretly hopes for more favorable news from another source by cunningly concealing previous information.

Communications do not necessarily focus on the illness and, in fact, rarely do. More often than not, the patient wishes to assure himself of the integrity of his personality, of his self-respect and, in a way, insure some measure of his immortality. The discussion of past or present achievements may well fulfill this purpose. Our principal ways of achieving immortality is by implanting memories of ourselves in the minds of others. An occasional patient will make small presents to his physician or others in the environment to be remembered, and they should be accepted and cherished.

We may want to ask ourselves when the patient should be told or, perhaps better, when the dialogue with the patient should be initiated. The patient will have developed misgivings, worries and doubts about his own condition long before a definitive diagnosis is established. There should be meaningful ongoing communication between physician, patient and family at all times, regardless of the phase of illness. Indeed, such continuous contact is essential to insure future understanding, confidence and mutual respect. Once the diagnosis is established, it may become necessary to propose rather painful or risky treatment methods to which the patient may not readily agree unless he has faith in his doctor's judgment and possesses some insight into the seriousness of his condition. At times, it is more difficult to obtain the patient's consent and cooperation for complex and, perhaps, even painful treatment methods than it is to help him grasp the fatal character of the illness.

Some authors try to distinguish diverse stages of psychological awareness. I shall limit myself to quoting two psychiatrists whose basic theoretical frameworks differ materially. The first, a research analyst,[3] distinguishes three stages: the initial stage of reduced alternative, and intermediate stage of middle knowledge and the terminal stage of counter control and cessation. During the first stage, the patient may feel quite well, which somehow complicates communication and decision-making although the patient may be quite willing to go along with certain modes of treatment. Indeed, it may be largely the family that resists during that period. The psychological atmosphere of this stage also is occasionally referred to as "Closed Awareness." It may have a quality of secrecy with the secret hopefully being shared by patient and physician. Presumably during this stage, the patient must learn to limit his plans for the future and reduce alternatives, to quote the author. I do not necessarily agree with the last concept because of the potentially paralyzing effect on the patient's daily activities.

The second stage of "Middle Knowledge" is essentially characterized by a surge of rapidly alternating and, at times, even opposite defense mechanisms. During this stage, the patient usually deals with certainty as uncertainty. He may consider himself to have recovered from an illness and be ready for new ventures. He may attribute discomforts to treatment rather than to the underlying condition and eventually challenge the physician's judgment. He will frequently enlist the help of family or friends to seek new remedies and grasp avidly at even irrational promises of cures.

The final stage, named "Counter Control and Cessation," consists essentially in "giving up." Unless the intermediate stage has been grossly mismanaged by family or caretakers, much can be done in the professional setting in the last phase to ease the patient's suffering because there is no need for deception or pretense and all efforts can concentrate on the adaptation for the end.

The psychological stages proposed by the other more clinically-oriented psychiatrist[4] number five and differ somewhat in sequence from the earlier described ones. Stage one consists of shock or denial. The patient will feel that somebody has made a mistake, that specimens were mixed up, that "it simply can't be so." He may withdraw or shop around for doctors, anticipating a more favorable judgment. Stage number two consists of anger and rage with bitterness, resentment and, at times, aggressivity. Stage three is the bargaining stage, to wit, "I'll be a good boy or girl—just give me a little more time." This stage is occasionally related to real events. The patients may like to attend the graduation of a child, a wedding, the birth of a grandchild or some similar event representing the previously-mentioned quest for immortality through remembrance. Stage four usually includes depression and preparatory grief. During this stage, the patient may prepare for the inevitable, take care of mundane affairs and simply get ready. Stage five is acceptance. At its very best, it is not simply passive resignation, but a more positive expression of being ready and in peace with their fate. At this point, the patient does not like much commotion, he prefers to have just one favorite visitor at a time and he no longer exhibits concern over his condition.

As in most human affairs, division into stages is a somewhat arbitrary method, especially when taken literally. There is no clear-cut progression from one stage to the next in the course of a fatal illness anymore than there is in early growth and development. Of course, certain attitudes may predominate, but it is equally true that the patient may fall back on earlier modes of adjustment. Eternal watchfulness is required of the physician and nursing personnel who simply must not be satisfied that they have "told the truth," nor should they acquiesce if the patient asks no further question. Communication is not static but an ongoing process, and we must always follow through. The ability to test reality becomes quite brittle when life is at stake. But communication is not limited to language. Attitude may be far more important. At times, we must be prepared to forego medical dignity or pride and engage in activities not customarily associated with the physician's work, but, perhaps, more meaningful to the patient in the later stages of his illness. A few spoonfuls of a favorite dish, a sip of a relished beverage or sharing family snapshots may be far more beneficial than the infusion of a scientifically concocted fluid containing electrolytes, vitamins or antibiotics presumably necessary for survival.

Survival indeed! Sympathy, compassion and understanding set the stage for the eternal survival that the patient craves during the last stages of life.

In this brief presentation, I have been able to hit only the highlights of communication with the fatally ill. I have attempted to bring into focus the nature of the fear of death, the social and cultural attitudes of man in general and, finally, I have concentrated on some of the outstanding conflicts and concerns experienced by the terminal patient and his environment.

In concluding, let me just add four basic rules which were proposed by a perceptive psychiatrist in one of the earlier books on the subject. I consider them to be simple and very meaningful:[5]

1. Do not tell the patient anything that might induce psychopathology.
2. Hope must never die too far ahead of the patient.
3. The gravity of the situation should never be minimized.
4. As much as possible, don't let the patient sit around idly awaiting death.

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Reprints: Henry K. Silberman, M.D.
Psychiatric Outpatient Clinic
Virginia Commonwealth University
Box 253, M.C.V. Station
Richmond, Va. 23219

Gastrocolic Fistula

(Continued from page 36)

cy of this condition, its symptomatology and management has been reviewed.

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Special X-ray Exhibit

SIDNEY RUBIN, M.D., RODGER LAMBIE, M.D., EDWIN HERMAN, M.D. *and* **LUZVIMINDA SICAT, M.D.,** ***Kansas City***

Radiologic Problem Case

A 79-YEAR-OLD WHITE WOMAN stated that her problem started in March, 1972 with an episode of diarrhea and abdominal cramps. This was accompanied by a mild elevation of temperature. This continued for approximately ten days after which her condition improved except for mild diarrhea. On March 14, 1972, she developed left lower quadrant tenderness.

Past History: The patient had been in generally good health until the present illness. Her only previous complaint was mild urinary dysfunction. The social and family histories were noncontributory.

Physical Examination: The patient was not in acute distress. Heart, ears, nose and throat were unremarkable. There were no glands demonstrable upon palpation. Blood pressure was 180/90. The abdominal examination revealed some tenderness localized to the left lower quadrant. No mass could be appreciated. The pelvic examination and sigmoidoscopic examinations were negative.

Laboratory Data: The SMA-12 values were normal except for a slightly elevated BUN (21.5 mg%) and a LDH which was slightly elevated (223 $m\mu/ml$). Urinalysis was normal. The hemoglobin level was 11.6 gm/100 ml. The hematocrit value was 33%. The white blood cell count was 9,000 per cu mm with a slight eosinophilia. The serum electrolyte determination showed the potassium to be 3.3 mEq/L. The VDRL was nonreactive. The chest X-ray was negative except for a calcified paratracheal node on the left. The EKG revealed a normal sinus rhythm with frequent atrial premature systoles.

Radiological Examination: The barium enema on March 14, 1972 demonstrated an irregular sigmoid with marked encroachment on the lumen so that barium was impeded in its flow through the segment of bowel containing multiple diverticula. The mucosa appeared coarse but intact. The stenosed area was funnel-shaped with gradual narrowing of the bowel lumen. The bowel appeared fixed to the pelvic floor (Fig. 1). The roentgen studies suggested a diverticulitis. An intravenous pyelogram was normal. On May 18, 1972, the patient was reexamined and the lesion was identical to that seen on the original study. The findings again suggested a diverticulitis with fixation of the sigmoid segment indicative of pericolonic inflammation (Fig. 2).

DISCUSSION

A stenotic segment of colon (predominately sigmoid) in the presence of multiple diverticula is statistically most apt to represent diverticulitis, a relatively facile diagnosis.

In the majority of cases, the classical findings will prevail, such as marked spasm associated with an alterable intestinal lumen. The mucosa appears to be intact although course and indurated. In the complicated case, a sinus tract may be demonstrated connecting with a contiguous abscess or adjacent loop of small bowel. In the more esoteric situation, the tract may enter the bladder or kidney.

These findings are in contradistinction to a carcinoma of the colon which is characterized by scalloped margins of bowel abruptly terminating the normal mucosa into an effaced or "apple core" deformity.

The challenge to the radiologist occurs in the case in which the diverticulum is pinched off by inflammation and a defect is observed in what appears to be a smooth-walled large bowel. Here the inflammation may masquerade as a neoplasm. In recent years, Marshak and his coauthors[1] have reported a series of cases in which intramural fistulae of sinus tracts running paral-

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The authors of this series of articles presenting unusual radiologic problem cases are from the Department of Radiology, Menorah Medical Center, where Doctor Rubin is Chairman.

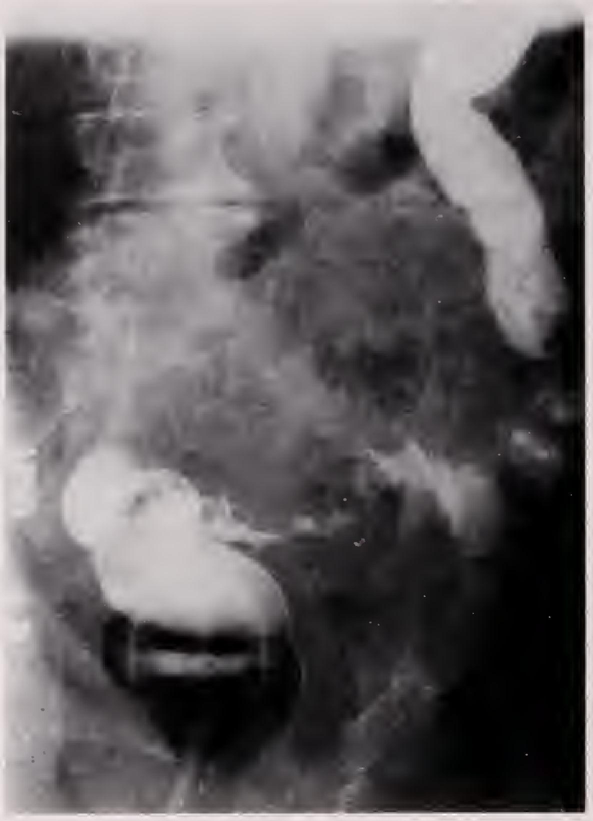

Fig. 1 Colon study revealed a segment of sigmoid containing diverticula and an altered lumen with course appearing mucosa. There is no evidence of fistulae, but the intestine is fixed.

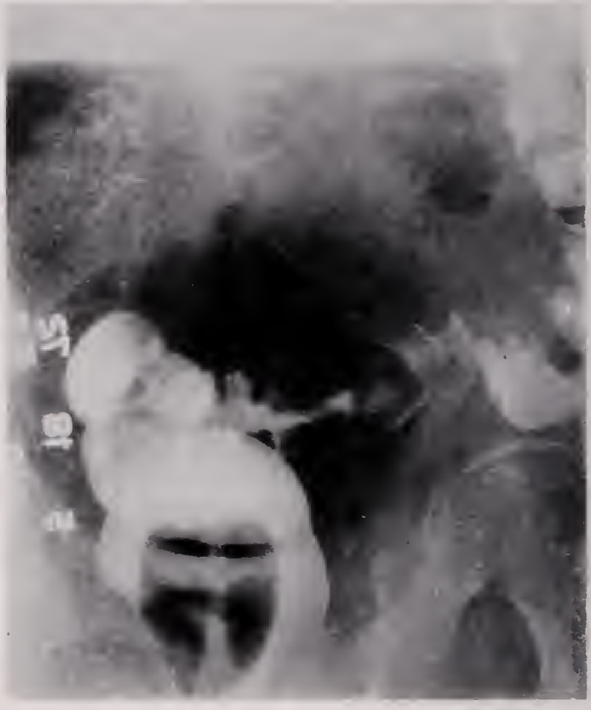

Fig. 2 The bowel is observed in a spot roentgenogram. There is no scalloping demonstrated. The lumen appears encroached upon, but there is no obstruction distal or proximal to the lesion. Fluoroscopy elicited marked discomfort and localized pain.

lel to a segment of diverticula of the colon represents granulomatous colitis (Crohn's disease of the colon). Heretofore, these areas have been considered to be due to diverticulitis. A sinus tract 10 cm or more is considered pathognonomic of granulomatous colitis when the sinus tract is longitudinal and intramural, as elucidated by the authors of this article.

To add further to the problem of differentiating carcinoma from diverticulitis, on rare occasions the neoplasm may contain a fistula with abscess formation, thus modifying the roentgen appearance of the lesion.[2]

In our case, the lumen appeared funnel-like with apparent preservation of the mucosa, which was alterable. Filling of the large bowel with barium evoked pain and inordinate discomfort. There was no scalloping of the peripheral borders of the lesion. In addition, diverticula were seen in and about the narrowed segment. With antibiotics, the patient noted some clinical improvement (most likely the inflammatory component subsided) and a recheck examination was performed. When the repeat study again demonstrated the extreme narrowing of the bowel, surgery was contemplated. The patient was operated on on May 24, 1972.

Radiological Diagnosis: Chronic and acute diverticulitis.

Pathological Diagnosis: A 6 cm-7 cm lesion was removed with attached ovary and posterior aspect of uterus. The lesion consisted of the following:

1. Moderately differentiated mucus producing ulcerating adenocarcinoma with extension to pericolonic fat.
2. Diverticulosis of a segment of colon.

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President's Message

Much to the amazement of the entire Missouri delegation at the AMA Clinical Session on November 26-29 in Cincinnati, one of the MSMA Councilors was unaware of the existence of the Missouri Room.

At each Annual and Clinical Session of the AMA, our Association maintains a special room to which every member of the MSMA is cordially invited. Here the member may consult with the officers and delegates of the MSMA and express his opinions concerning the legislative problems before the House of Delegates. Those members with particularly specific knowledge on certain issues can testify before AMA Reference Committees to make their positions known.

Walter T. Gunn, M.D.

The Missouri Room also is used for daily caucuses of all the MSMA officers and delegates to disseminate information each has collected while attending debates in all of the Conference Committees. Policy is thus determined and implemented by our four AMA Delegates.

The room also serves as a forum to introduce to the delegates from other states those candidates which the Missouri delegation is supporting for election to AMA councils and committees. Finally, the candidates for elective offices in the AMA visit the room to present their policies and opinions to the Missouri delegation.

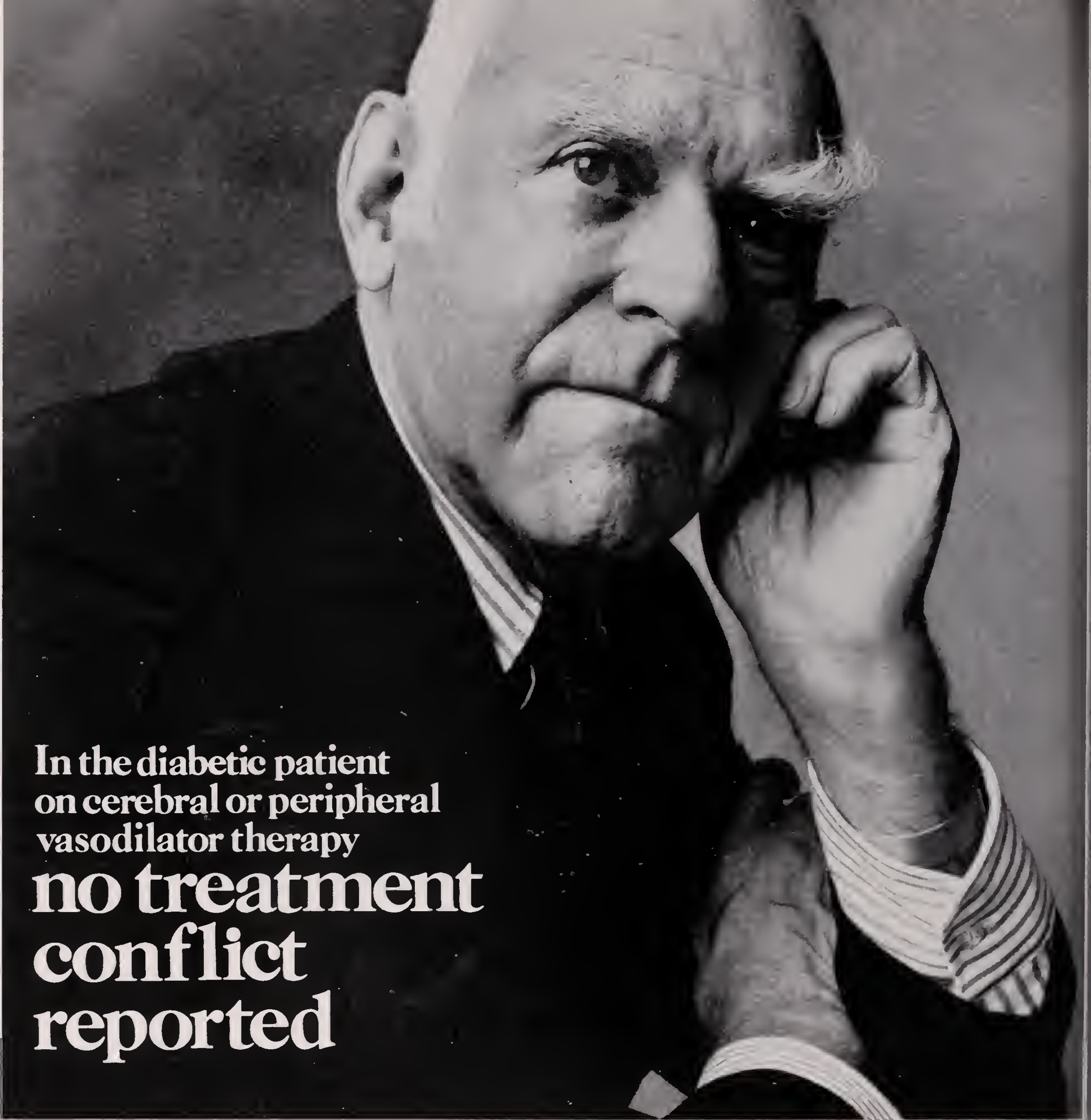
As we have all come to expect, the Missouri delegation again did a fine job of representing our Association at the meeting.

Quotable quotes from the meeting:

"HMO is a concept searching for a structure."

"We, too, had a drug problem as teenagers—what drugs to use to clear up those pimples."

An elder statesman urging the continuation of smallpox vaccination said, "Some of you youngsters opposing smallpox vaccination have never seen a case of smallpox." He then showed a series of slides reminiscent of the horror VD training films of World War II.



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Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's disease) and Raynaud's disease.
3. Threatened abortion.

Final classification of the less-than-effective indications requires further investigation.

COMPOSITION: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.

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DOSAGE AND ADMINISTRATION: 10 to 20 mg. three or four times d

CONTRAINDICATIONS AND CAUTIONS: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arteri bleeding.

ADVERSE REACTIONS: On rare occasions, oral administration of the has been associated in time with the occurrence of severe rash. When ra appears, the drug should be discontinued. Occasional overdosage effects suc as transient palpitation or dizziness are usually controlled by reducing the do

SUPPLIED:
Tablets, 10 mg.—bottles of 100, 1000, 5000 and Unit Dose
20 mg.—bottles of 100, 500 and Unit Dose

REFERENCE: 1. Samuels, S. S., and Shaftel, H. E.: J. Indiana Med. Ass. *54*:1021-1023 (July) 1961.

Mead Joh
LABORAT

Woman's Auxiliary

We, of the Woman's Auxiliary, have many new and important resolutions for the coming year. We have been challenged to help preserve the freedom and rights of private physicians. We must help to strengthen the AMA's hand in Washington and to expand health education programs on the community level. We must continue to encourage membership in AMPAC and MMPAC for all physicians' wives, as well as physicians, especially since we are told that national health insurance will be considered early in the next congress. Increased membership is still my top priority for the year, and we must renew our efforts to achieve our goals.

Do read Harry Schwartz's new book, "A Case for American Medicine." This book presents excellent cases for American Medicine that should help to influence a change in public attitude. It is exciting to learn that the public temper is becoming more favorably disposed toward medicine. Ernest B. Howard, M.D., AMA Executive Vice-President, has predicted a sharp change in the attitude of young physicians who are now beginning to work with the establishment.

Mrs. Keith D. Jones
President

I am pleased to report to you that . . .

. . . The Woman's Auxiliary appreciates the invitation from Dr. Richard Bowles and Dr. John I. Matthews to participate in the MSMA Annual Public Affairs Conference in Jefferson City on February 3-4. The Auxiliary voted to support the conference and, in addition, will hold a midwinter Board meeting on the morning of February 3 for our current and incoming board members.

. . . Our MSMA Auxiliary's Health Education Conference has been selected by the AMA Woman's Auxiliary as the pilot program for all other state auxiliaries. This honor would not have been possible without the help and support of the MSMA. Hopefully, each local community will sponsor a similar conference so that EFFORT will be coordinated everywhere and EFFECT will take place.

. . . Dr. Paul R. Whitener has donated a beautiful wooden plaque to be awarded to the Auxiliary which gives the most per capita to the Missouri State Medical Foundation. It will be rotated to the top Auxiliary each year. At this time, the Auxiliary members have donated more than $1,000 to the MSMF, and we hope that each county auxiliary has a fund raising project for this worthwhile cause. If a MSMA member makes his contribution in his wife's name, her county auxiliary will receive credit.

. . . I'd like for everyone to start the New Year with a smile, so I'll share a funny story about a group of youngsters who elected a four-year-old boy to be their president. They explained, "Well, it's like this. He doesn't write, so he couldn't be secretary. He can't count, so he couldn't be treasurer. He's too little to throw anybody out, so he wouldn't be a good sergeant-at-arms. If we didn't choose him for some office, he'd be unhappy and cry. So . . . we just elected him president!" (My apologies to all of our new county auxiliary presidents . . . and best wishes to everyone for a great 1973.)

EDITORIAL

'BIG BROTHER' HEALTH SCHEMES

Reality for some of our legislators in Washington is a terrible thing. They simply can't face it.

This becomes painfully clear when the subject of health insurance is raised.

Sen. Edward Kennedy chooses to ignore the fact that the federal government is now spending so much money there is no way to increase these record outlays without also enacting big tax hikes.

He proposes a federally-financed national health insurance program that would cost the government from $53 billion to $77 billion by 1974.

To finance this huge program, the Kennedy plan would tax employes 1 per cent on income up to $15,000, employers 3.5 per cent of the total payroll and extract the remaining funds by taking 3.5 per cent of general revenues.

This, of course, is fiscal madness.

Employers, starting in January, will be matching the 5.85 per cent Social Security tax employes pay on the first $10,000 of their salary. Kennedy would add 3.5 per cent of the total payroll cost to this.

And, by taking 3.5 per cent of general revenues, he would automatically force either an equivalent tax increase or addition to the anticipated annual deficit of about $30 billion.

Kennedy has to be dreaming if he thinks this is possible.

Obviously, many employers couldn't take another big confiscation of their receipts for this or any other purpose without going broke.

Just matching the Social Security increases that come nearly every year is getting to be increasingly difficult for some owners.

Republicans rightly oppose the irresponsible Kennedy health plan. But what do they offer?

They would require all employers of one or more persons, with few exceptions, to "provide minimum-standard health-insurance protection for their employes and dependents of employes."

They would insist that an employer pay at least 65 per cent of the premium costs initially, and 75 per cent later.

This is just as bad as Kennedy's plan to hit companies with an across-the-board 3.5 per cent.

The government has no authority to tell businessmen they must provide for 65 per cent or 75 per cent of their employes' health insurance.

It has already saddled them with an open-ended Social Security expense. It is unthinkable to heap a big, mandatory health insurance program on top of this.

Most businesses are doing extremely well if they can make a profit of 7 per cent on their gross sales and 4.5 per cent after taxes. There is a limit on how much most firms can take from their profits and apply to employe benefits.

This is the reality that must be faced.

If the present trend of loading up businesses with all kinds of social responsibilities continues, profits will drop to the vanishing point, with the result that there won't be enough money either for new capital investment or research and development.

When this happens, there will be no way for the economy to go but down. Which will bring on a recession, loss of many millions of jobs and the end to the pipedreams of the social planners.

Reprinted from the *St. Louis Globe-Democrat*
December 6, 1972

IMPROVED ACCIDENT & HEALTH PROGRAMS

The Disability Income Policy sponsored by the Missouri State Medical Association since 1943 has now been made GUARANTEED RENEWABLE and income benefits are available up to $300.00 weekly to members under age 56 subject to acceptance by the Company.

Also, the Major Hospital and Nurse Expense Program offers higher limits with increased Room & Board Benefits.

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Continuing Education Coming Events

Jan. 19-20	**Ob-Gyn Conference (Bedside Rounds)** Continuing Education, M.U. School of Medicine Columbia 65201
Jan. 29-30	Symposium: **Cardiac Auscultation** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan. 66103
Feb. 1-2	Symposium: **Diagnostic Cytology** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan. 66103
Feb. 7	**Conference: Office Pediatrics** Continuing Education, M.U. School of Medicine Columbia 65201
March 12-14	Symposium: **Pediatrics** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan. 66103
March 26-28	Symposium: **Surgery** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan. 66103

Symposium on Management of the Burn Patient

A symposium on the management of the burn patient will be held at the Chase Park Plaza Hotel on Feb. 16-17, 1973, under the joint sponsorship of the Department of Plastic and Reconstructive Surgery and the St. Louis Committee on Trauma of the American College of Surgeons.

The program is designated to inform general surgeons, emergency department physicians and other primary care physicians about the most recent advances in burn therapy.

Speakers will include Dr. Basil Pruitt, Burn Unit, Brooke General Hospital, San Antonio, Tex. and Dr. Paul Weeks, Director, Burn Unit, Barnes Hospital, St. Louis. The program is under the direction of Dr. Robert C. Wray, M.D., F.A.C.S., Assistant Professor of Plastic and Reconstructive Surgery, and Dr. Allen P. Klippel, M.D., F.A.C.S., Chairman, St. Louis Committee on Trauma, A.C.S.

Participants in the program will be accredited by the American Academy of Family Practice. Interested physicians should contact Dr. Robert C. Wray, M.D., F.A.C.S., 4960 Audubon Ave., St. Louis, Mo. 63110.

AMA National Congress on Quality of Life

"The Middle Years" will be examined at a second AMA National Congress on the Quality of Life to be presented March 7-9 in Chicago. The program will focus on the struggles and opportunities encountered during early adulthood, mature adulthood and in the transitional years (55-65). Goal of the Congress, one of a continuing series of Quality of Life programs being sponsored by the AMA, is to stimulate coordinated interdisciplinary efforts to improve health, social, educational and environmental conditions. Direct inquiries to "Quality of Life," AMA.

County Society News

FIRST DISTRICT

COUNCILOR
JOHN N. MARTIN, M.D., ST. JOSEPH

Buchanan County Medical Society

For the 17th consecutive year, members of the Buchanan County Medical Society and the St. Joseph Bar Association met jointly for a dinner and program. Eighty-two physicians and attorneys attended the event in the Empire Room of the Hotel Robidoux in November.

As presidents of the two professional groups, Lawrence H. Pifer, M.D. and Stanley I. Dale, a former mayor of St. Joseph, presided jointly. Speaker for the occasion was Herbert C. Modlin, M.D., chairman of the Department of Preventive Psychiatry at the Menninger Foundation in Topeka, Kan. His subject was "Traumatic Neurosis."

Doctor Modlin was introduced by Wendell E. Koerner, Jr., chairman of the Bar Association's program committee. Martin J. Fischer, M.D., was chairman of arrangements for the Medical Society.

William B. O'Connor, M.D., *Secretary*

Grand River Medical Society

Thirty members, wives and guests met at the Strand Hotel in Chillicothe on November 9, 1972 for a social hour and dinner.

William F. Benson, M.D., Kansas City, was the speaker and gave a comprehensive discussion of "Infections, Injuries and Reconstructive Surgery of the Hand."

The Woman's Auxiliary auctioned Korean egg rolls, brownies, pecan pies, homemade bread, "Hello Dollies," nuts, relish and other food items. The proceeds will be given to the AMA-ERF.

The Emergency Medical Program of the Regional Medical Program was discussed, and the Grand River Medical Society went on record as favoring the program in principle.

Delegates and alternates for the MSMA Annual Session in St. Louis on March 29-April 1 were elected, as follows: *Caldwell County*, Frank R. Daley, Hamilton, and George Mandler, Chillicothe; *Carroll County*, E. W. Allen and John H. Platz, Carrollton; *Daviess County*, Edward E. Nixon, Gallatin, and Larry Dowell, Pattonsburg; *DeKalb County*, B. D. Howell, Brookfield, and E. L. Bales, Carrollton; *Grundy County*, Albert D. Cross and William A. Fuson, Trenton; *Harrison County*, Merriam Gearhart, Bethany, and Willard Ellsworth, Cainsville; *Linn County*, John R. Dixon and Robert W. Smith, Brookfield; *Livingston County*, Tom N. Cofer and Donald M. Dowell, Chillicothe; *Mercer County*, Windsor B. Atcheson, Trenton, and Joseph Conrad, Chillicothe.

Frank R. Daley, M.D., *Secretary*

SECOND DISTRICT

COUNCILOR
LYSLE M. BACH, M.D., HANNIBAL

Chariton-Macon-Monroe-Randolph County Medical Society

The regular meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held on November 9 in the Medical Library at Woodland Hospital in Moberly.

Officers for 1973 were elected as follows: President, Robert H. Young, Moberly; Vice-President, James E. Campbell, Macon; and Secretary-Treasurer, Robert V. Tompson, Moberly.

Charles E. Mengel, M.D., Chairman of the Department of Medicine, University of Missouri-Columbia Medical Center, provided the program, which was arranged by Dr. J. Will Fleming, Jr. Doctor Mengel's subject was "Blood and Drugs." Following his formal discussion, he answered many questions from the floor.

Members present were Drs. Gretchen D. Collins and D. E. Eggleston, *Macon County;* F. A. Barnett, *Monroe County;* Josephine D. Baker, W. D. Chute, C. C. Cohrs, P. V. Dreyer, T. S. Fleming, L. E. Huber, R. V. Tompson and Robert H. Young, *Randolph County*.

Guests were David Fleming, son of Dr. J. Will Fleming, and Russ Burcham, who are medical students at the University of Missouri Medical Center.

W. D. Chute, M.D., *Secretary*

EIGHTH DISTRICT

COUNCILOR
HOWARD J. McALHANY, M.D.,
SPRINGFIELD

Jasper County Medical Society

The November meeting of the Jasper County Medical Society was held at Twin Hills Golf and Country Club in Joplin.

James D. Dexter, M.D., Assistant Professor of Medicine (Neurology), University of Missouri-

Columbia School of Medicine, presented a scientific program entitled "Headaches—Diagnosis and Treatment."

Doctor Dexter was the co-recipient of the American Academy of General Practice Gold Medal Award for his exhibit dealing with chronic reoccurring headache, aspects of diagnosis and differential diagnosis in 1968. He also was the co-recipient of the Benjamin Rusk Silver Award for scientific exhibit of the American Psychiatric Association in 1969. A native of Independence, he attended the University of Missouri School of Medicine and received his M.D. degree in 1963.

TENTH DISTRICT

COUNCILOR
EUGENE T. HANSBROUGH, M.D.,
POPLAR BLUFF

Butler-Wayne-Ripley County Medical Society

The Tri-County Medical Society elected officers for the coming year at its October meeting in Poplar Bluff. They are Drs. E. C. Carlson, President; Ricardo M. Ramirez, Vice-President; Tom Wood, Secretary; and Barry B. White, Treasurer.

Dunklin County Medical Society

Dr. W. D. English, Cardwell, was elected President of the Dunklin County Medical Society at the November meeting. He will succeed outgoing President M. L. Sisler, Kennett. Other newly-elected officers are Drs. C. R. Peck, Kennett, Vice-President; Quinton Tarver, Kennett, Secretary; and George Q. Dunmire, Kennett, Delegate to the MSMA House of Delegates.

"Now, that's what I call a booster shot!"

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New Members

Adhmed S. Abdel-Salam, M.D., George Dimmitt Memorial Clinic, Humansville, has become a member of Dallas-Hickory-Polk-Dade County Medical Society. Dr. Abdel-Salam is a native of Cairo, V.A.K., received his preliminary education at Cairo University and his M.D. degree at Cairo University in 1966. He specializes in orthopedic surgery.

Andres G. Apostol, M.D., 801 Lincoln, Monett, has become a member of Ozarks Medical Society. Dr. Apostol is a native of Ilagan, Isabela, Philippines, received his preliminary education at St. Ferdinand College and University of Santo Tomas and his M.D. degree at University of Santo Tomas in 1964. He specializes in general surgery and general practice.

Arnold Z. Balanoff, M.D., 601 E. 63rd, Kansas City, has become a member of Jackson County Medical Society. Dr. Balanoff is a native of Des Moines, Ia., received his preliminary education at the University of Iowa and his M.D. degree at the University of Iowa in 1967. He specializes in pediatrics.

Barbara N. Buchanan, M.D., 4643 Wyandotte, Kansas City, has become a member of Jackson County Medical Society. Dr. Buchanan is a native of St. Louis, received her preliminary education at the University of Missouri-Columbia and her M.D. degree at the University of Missouri-Columbia in 1961. She specializes in psychiatry (child and adolescent).

George A. Carder, M.D., 434 Blue Ridge Tower, Kansas City, has become a member of Jackson County Medical Society. Dr. Carder is a native of Liberty, received his preliminary education at William Jewell College and his M.D. degree at Washington University in 1964. He specializes in otorhinolaryngology.

Michael A. Gentry, M.D., 1211 S. Glenstone, Springfield, has become a member of Greene County Medical Society. Dr. Gentry is a native of Ava, received his preliminary education at Southern Methodist University and his M.D. degree at the University of Missouri in 1964. He specializes in dermatology.

Frederic L. Hamburg, M.D., 2757 Normandy, Springfield, has become a member of Greene County Medical Society. Dr. Hamburg is a native of Evansville, Ind., received his preliminary education at Vanderbilt University and his M.D. degree at Vanderbilt University in 1966. He specializes in pediatrics.

Fritz M. Johnson, M.D., 609 Cherry, Springfield, has become a member of Greene County Medical Society. Dr. Johnson is a native of Hobart, Okla., received his preliminary education at Kansas University and his M.D. degree at Kansas University in 1965. He specializes in thoracic and cardiovascular surgery.

Mohammed Igbal Karatela, M.D., Apt. F, 4278 Chateau DeVille Dr., Mehlville, has become a member of St. Louis County Medical Society. Dr. Karatela is a native of Rajkot, India, received his preliminary education at D. J. Science College and his M.D. degree at Dow Medical College in 1964. He specializes in child psychiatry.

Wallace McDonald, M.D., 301 N. 8th, St. Joseph, has become a member of Buchanan County Medical Society. Dr. McDonald is a native of St. Louis, received his preliminary education at the University of Missouri and his M.D. degree at the University of Pennsylvania in 1966. He specializes in internal medicine.

Edwin J. Masters, M.D., 310 W. Gabriel, Advance, has become a member of SEMO County Medical Society. Dr. Masters is a native of Poplar Bluff, received his preliminary education at Dartmouth College and his M.D. degree at the University of Tennessee in 1971. He specializes in general practice.

Carl M. Mentgen, M.D., 1550 E. Sunshine, Springfield, has become a member of Greene County Medical Society. Dr. Mentgen is a native of Marysville, Kan., received his preliminary education at Kansas State University and his M.D. degree at Kansas University in 1965. He specializes in internal medicine.

Dwarka Nath Mishra, M.D., Humansville, has become a member of Dallas-Hickory-Polk-Dade County Medical Society. Dr. Mishra is a native of Hajipur, India, received his preliminary education at Patna Science College and his M.D. degree at Darbhanga Medical College in 1950. He specializes in general practice (emphasis on surgery and urology).

Bin Mou, M.D., Nevada State Hospital, Nevada, has become a member of West Central Missouri Medical Society. Dr. Mou is a native of China, received his preliminary education at Enshi, Hupei, China and his M.D. degree at National Defense Medical College in 1950. He specializes in psychiatry.

Somporn Nukrongsin, M.D., Jewish Hospital of St. Louis, St. Louis, has become a member of

St. Louis County Medical Society. Dr. Nukrongsin is a native of Bangkok, Thailand, received his preliminary education at Chulalongkorn University Faculty of Science and his M.D. degree at Siriraj Hospital University of Medical Science in 1963. He specializes in anesthesiology.

Gordon S. Paulson, M.D., Suite 210, Pioneer Bldg., St. Joseph, has become a member of Buchanan County Medical Society. Dr. Paulson is a native of Tyler, Minn., received his preliminary education at Olaf College and the University of Minnesota and his M.D. degree at the University of Minnesota in 1943. He specializes in internal medicine.

Larry W. Piebenga, M.D., 132 Penn Park Medical Center, Kansas City, has become a member of Jackson County Medical Society. Dr. Piebenga is a native of Volga, S. D., received his preliminary education at the University of Arkansas and his M.D. degree at the University of Arkansas in 1964. He specializes in ophthalmology.

Kamalesh K. Reddy, M.D., 4643 Wyandotte, Kansas City, has become a member of Jackson County Medical Society. Dr. Reddy is a native of Hyderabad, India, received her preliminary education at Women's College, Hyderabad, India and her M.D. degree at Osmania Medical College in 1961. She specializes in psychiatry (general and child).

Dean R. Rising, M.D., 1211 S. Glenstone, Springfield, has become a member of Greene County Medical Society. Dr. Rising is a native of Kansas City, received his preliminary education at the University of Kansas and his M.D. degree at the University of Kansas in 1966. He specializes in pediatrics.

Judy C. Robbins, M.D., 2435 E. Cambridge, Springfield, has become a member of Greene County Medical Society. Dr. Robbins is a native of Ft. Worth, Tex., received her preliminary education at the University of Oklahoma and her M.D. degree at the University of Oklahoma in 1967. She specializes in anesthesiology.

Narendra M. Saxena, M.D., Missouri State Chest Hospital, Mt. Vernon, has become a member of Ozarks Medical Society. Dr. Saxena is a native of Gwahior, India, received his preliminary education at Vietone College and his M.D. degree at MAM Medical College in 1969. He specializes in chest medicine.

Wayne Stubblefield, M.D., 1715 Boonville, Springfield, has become a member of Greene County Medical Society. Dr. Stubblefield is a native of Winchester, Tenn., received his preliminary education at the University of Tennessee and his M.D. degree at the University of Tennessee in 1967. He specializes in general practice.

Robert R. Stuber, M.D., Suite 210, Pioneer Bldg., St. Joseph, has become a member of Buchanan County Medical Society. Dr. Stuber is a native of St. Joseph, received his preliminary education at the University of Kansas and his M.D. degree at the University of Kansas in 1965. He specializes in internal medicine.

Robert L. Sugar, M.D., 14 Doctor's Bldg., Kansas City, has become a member of Jackson County Medical Society. Dr. Sugar is a native of Brooklyn, N. Y., received his preliminary education at Long Island University and his M.D. degree at State University of New York-Downstate in 1966. He specializes in obstetrics and gynecology.

Thomas P. Thamarappally, M.D., 220 Penn Park Medical Center, Kansas City, has become a member of Jackson County Medical Society. Dr. Thamarappally is a native of Kerala, India, received his preliminary education at the University of Agra-Agra and his M.D. degree at Bangalor Medical College in 1961. He specializes in otorhinolaryngology.

Roger J. Waxelman, M.D., 7619 Stanford, St. Louis, has become a member of St. Louis County Medical Society. Dr. Waxelnan is a native of St. Louis, received his preliminary education at Washington University and his M.D. degree at the University of Missouri-Columbia in 1969. He specializes in pediatrics.

Joseph J. Woehl, M.D., 620 Medical Plaza, Kansas City, has become a member of Jackson County Medical Society. Dr. Woehl is a native of Bayonne, N. J., received his preliminary education at the Georgetown University and his M.D. degree at New York Medical College in 1959. He specializes in neurology.

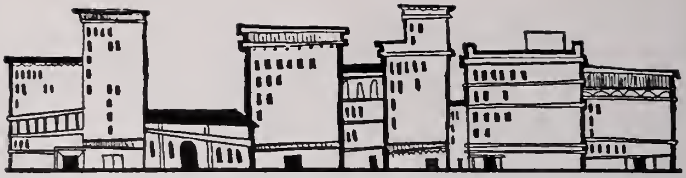
MSMA 115TH ANNUAL SESSION

Welcome, New Members!

March 29-April 1,
1973

Chase-Park Plaza Hotel
St. Louis

From the Medical Schools



ST. LOUIS UNIVERSITY

Dr. Edward A. Doisy, Sr., Nobel Laureate and distinguished service professor and chairman emeritus of the Edward A. Doisy Department of Biochemistry, St. Louis University School of Medicine, was the recipient of the 12th annual Barren Foundation medal presented in Chicago on Nov. 15, 1972.

Dr. Doisy

The Barren Medal is presented each year to a distinguished member of the medical profession who, in the opinion of the Barren Foundation Medical Advisory Board, has made a major contribution toward progress and research in the field of reproduction.

In 1929, Doctor Doisy was the first to isolate estrogenic hormone from human urine, obtaining estrone in crystalline form. In 1943, he shared the Nobel Prize in physiology and medicine with *Dr. Henrik Dam* for isolating and determining constitution and synthesis of Vitamin K.

Doctor Doisy was honored by St. Louis University upon his retirement in 1965 when a day-long scientific symposium was held at which four other Nobel Prize winning scientists spoke.

A new research wing addition to the St. Louis University School of Medicine named Doisy Hall was dedicated in 1968 to honor him as one of the most distinguished professors ever to hold faculty rank at the University.

Dr. Robert H. Felix, dean of the School of Medicine and former director of the National Institute of Mental Health, was honored by the Mental Health Section Centennial Award of the American Public Health Association.

The award, an honor plaque, was presented on Nov. 15, 1972 in Atlantic City at a luncheon during the APHA's centennial celebration.

Dean Felix was cited for being responsible more than any other man for the progress which has been made in the United States in the nation's attack on mental illness and the struggle for mental health.

Dr. Felix

The Dean's honor citation said in part "your long and highly distinguished career in the Public Health Service reached a peak with your appointment as Chief of the Mental Hygiene Division in 1944, the predecessor organization of the National Institute of Mental Health." It continued, "Perhaps the climax of your work came in 1963 when the 88th Congress enacted the Community Mental Health Centers Act authorizing funds to aid in constructing comprehensive community mental health centers across the nation. Literally hundreds of professional people have responded to your ability to attract and help us develop in our own fields through your encouragement and leadership."

Dr. Mabel Ross, formerly Regional Medical Director of the Regional Medical Office, U. S. Public Health Service, accepted the award for Dean Felix who was attending the Federal Hospital Council meeting in Washington at the time.

The new research building of the Anemia and Malnutrition Research Center of Chiang Mai University and St. Louis University located in Chiang Mai, Thailand, will be dedicated at a ceremony presided over by the King of Thailand during the period of Jan. 8-11, 1972. The Research Center was established by the two Universities in 1967 with the aid of grants from the National Institutes of Health under the Japan-U. S. Medical Sciences Program and has been in operation in temporary quarters since its establishment. The new building to house the Center has been under construction since 1969 and was completed in October 1972 with the aid of funds appropriated by the Thailand Government and the Rockefeller Foundation.

Dr. Robert E. Olson, professor and chairman of the Edward A. Doisy Department of Biochemistry, who is director of the Center, will be present to participate in the symposium on Malnutrition and in the dedication ceremony.

UNIVERSITY OF MISSOURI-COLUMBIA

Giulio J. Barbero, M.D., nationally-known for his work in pediatric gastroenterology and nutrition research for children, became the new chair-

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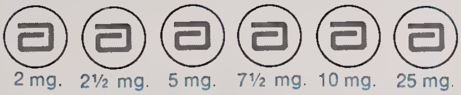
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Dr. Barbero

man of the Department of Pediatrics at the School of Medicine on December 15, 1972.

The Pediatrics Department has been headed by *Dr. Robert L. Jackson* since the four-year medical school was established in Columbia in 1956. Doctor Jackson will remain as professor in the department, concentrating on his primary interest in diabetic children. Under his direction, the Midwest's largest clinic for children with diabetes is operated through the University Medical Center.

Chairman of pediatrics at Hahnemann Medical College and Hospital in Philadelphia for the past six years, Doctor Barbero has been especially active in the national Cystic Fibrosis Research Foundation. In 1969, he was president of the Philadelphia Pediatric Society. He also has served on the committee on children with handicaps for the American Academy of Pediatrics and on a drug study committee for the National Research Council.

Doctor Barbero received his undergraduate education at the University of Maine and was awarded the M.D. degree in 1947 from the University of Pennsylvania. He took residency training at Children's Hospital in Philadelphia and received board certification in 1954. He began an academic career in medicine at the University of Pennsylvania and was on the staff there until he went to Hahnemann in 1967.

"Doctors and Computers" was the topic *Dr. Gwilym S. Lodwick* discussed at a meeting of the Sigma Xi science fraternity on November 16, in Memorial Union auditorium.

Doctor Lodwick, professor and chairman of the Department of Radiology in the School of Medicine, was announced last spring as the winner of the Sigma Xi award for research for 1972.

Internationally recognized for his research in computer applications in radiology, Doctor Lodwick has been largely responsible for inaugurating interdisciplinary bioengineering programs on the Columbia campus. He is noted for his pioneering efforts in computer-assisted diagnosis of bone tumors and, more recently, development of a computer program for automated diagnosis of heart and lung disease.

Prof. Wayne Decker, chairman of the Department of Atmospheric science, is president of the Missouri chapter and presided at the award banquet.

Linley E. Watson, M.D., assistant professor of medicine at the University Medical Center, presented a paper to the 1972 scientific sessions of the American Heart Association in Dallas, Tex. on November 16. He discussed the residual contractile left ventricle in patients with left ventricular aneurysm. Co-authors of the paper are Drs. *Richard H. Martin,* chief of cardiology, and *Donald W. Dickhaus* of the Department of Medicine.

WASHINGTON UNIVERSITY

Carl F. Moyer, M.D., chief resident in orthopedic surgery at Barnes Hospital, has received the fifth J. Albert Key Memorial Fellowship at Washington University School of Medicine.

The award and accompanying $500 honorarium were presented Tuesday to Doctor Moyer on Dec. 5, 1972 by *Fred D. Reynolds,* M.D., professor of orthopedic surgery.

The fellowship was established as a memorial to the late professor of orthopedic surgery at the Medical School from 1924 to 1955. Doctor Key also served as president of both the American Academy of Orthopedic Surgeons and the American Orthopedic Association. The award is given to an orthopedic resident who has demonstrated exceptional ability and performance.

Previous recipients are *W. Edward Lansche,* M.D., 1959; *William S. Costen,* M.D., 1951; *Raymond A. Ritter,* M.D., 1967; and *James C. Ellsasser,* M.D., 1969. Doctors Lansche and Costen are clinical instructors and Doctor Ellsasser is assistant professor of orthopedic surgery.

Doctor Moyer received the M.D. degree in 1966 from Marquette University School of Medicine, Milwaukee, Wis., where he was elected to Alpha Omega Alpha national medical honor society. After internship at Wayne County General Hospital in Eloise, Mich. and two years of medical service with the Army, he came to Washington University Medical Center.

Two Russian scientists were scheduled to visit Washington University School of Medicine on November 19-22, 1972 as participants of a National Cancer Institute exchange program.

The visitors, Dr. A. I. Pirogov and Dr. Ekaterina S. Kisileva, are from the Herzen Oncological Institute, Moscow, where he is chief of the Thoracic Surgery Department and she is chief of the Radiotherapy Department. They were on a two-month tour of cancer centers and medical schools to make arrangements for Russian physicians and scientists to study in the United States.

The exchange program is part of the National Cancer Act passed in August, 1971, by Congress and signed into law by President Nixon in December, 1971.

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LEO H. POLLOCK, M.D.

Missouri Medicine in Review

FORTY YEARS AGO

The Economic Survey Committee of the St. Louis Medical Society presented an exhaustive report to the Society at the meeting of December 13 on "Automobile Accidents and Emergency Treatment." It requests that the Missouri State Medical Association draft a bill for introduction in the 1933 session of the Legislature with the view of providing a reasonable assurance of payment of fees of physicians and hospitals for services rendered in emergencies resulting from automobile accidents. The Committee proposed that this protection take the form of a lien upon any moneys received by the person responsible for the accident as payment of liability damages. Lien laws to protect physicians and hospitals have been adopted in six states, namely, Delaware, Montana, Nebraska, New Jersey, Oregon and Virginia.

Dr. Harvey Jennett, Kansas City, was appointed superintendent of the Kansas City General Hospital on November 21. Doctor Jennett fills the vacancy created by the death of Dr. Porter E. Williams.

The appointments to the autopsy staff of Frank P. Furlong, newly-elected coroner of St. Louis, have been completed. The staff of nine physicians is composed of Drs. William J. Doyle, Ralph L. Thompson, Downey L. Harris, Eugene J. O'Malley, J. F. J. Nawrocki, E. C. O'Brien, John J. Connor, O. S. McClellan and L. A. Brandenburger. Coroner Furlong has announced a new policy of performing autopsies at the hospitals in which the patients die when legally possible so that interns may benefit from the proceedings.

Dr. E. M. Frommer, St. Joseph, has been notified by the Hungarian Society of Pathology that he has been awarded the Society's Schoenlein prize medal for 1932 for outstanding research work in cancer. While in Europe about a year ago, Doctor Frommer submitted a treatise to the Society entitled "The Role of Metaplastic Changes in the Pathology of Cancer."

TWENTY-FIVE YEARS AGO

Is cardiovascular disease an occupational hazard to physicians? Are doctors dying earlier now than formerly? To answer these questions, Reginald Fitz (Archives Internal Medicine, 76:210 [October] 1945) has studied the mortality tables for physicians found in the *Journal of the American Medical Association*. In his conclusions, which are interesting and offer a degree of comfort, he reveals that year by year, more physicians reach the age of 60. The total number living beyond 60 is increasing steadily, and a greater number reach 70 and 80. If deaths from cardiac, renal and cerebral vascular diseases are grouped, physicians between 40 and 60 years of age appear to die a little more commonly from these diseases than do members of the general white male population, probably because they have a better chance of avoiding earlier death from other causes. Fitz believes that as the profession grows larger and older, mortality from vascular disease will increase.

Frank J. Koenig, M.D., Kansas City, was elected president of the Missouri Association of Mental Hygiene at its annual meeting in Kansas City on November 17. G. W. Robinson, Jr., M.D., Kansas City, was elected vice-president.

The American Pharmaceutical Manufacturers' Association, New York, made its 1947 scientific award to the American Medical Association in recognition of its fundamental contributions to public health in the field of medical research. The award was made on nomination by a committee of 16 eminent scientists and was presented at a ceremony in the Waldorf Astoria Hotel in New York on December 16.

TEN YEARS AGO

When the 88th Congress convenes, it will have only three physicians in its membership. Dr. Durward G. Hall, Springfield (R-Mo.) and Dr. Thomas E. Morgan (D-Pa.) are returning to the House of Representatives. When the House convenes on January 9, Dr. James D. Weaver, Erie, Pa. (R-Pa.) will take oath for the first time. Doctor Weaver was one of seven physicians who were candidates for the first time and is the only one who was elected.

The St. Louis Medical Society's annual Beaumont Pilgrimage to the grave of Dr. William Beaumont in Bellefontaine Cemetery in St. Louis was made on November 21. The address was delivered by Brig. Gen. O. P. Hampton, Jr., M.C., St. Louis.

The Department of Health, Education and Welfare listed 25 new laws enacted by Congress in 1961-1962 which it felt were of major importance to the department. Those dealing with health were given as Public Law 87-781, which amended the Federal Food, Drug and Cosmetic Act to assure safety and effectiveness of drugs, to standardize names and to strengthen the authority of factory inspection.

The total number of students enrolled in medical schools for 1961-1962 was 31,078, which represents an increase of 790 students over the previous year and the largest increase for any one year since 1951, the report showed. Approval of the University of Colorado School of Medicine accounted for 355 of the 790 additional students.

*(Dr. Leo H. Pollock wishes to express his appreciation to Dr. Gertrude Lamb, medical librarian at the University of Missouri-Kansas City School of Medicine, for making available the reference books used in writing this column.—*Ed.)

MAFP Installs New Officers at Annual Assembly

Ben H. Koon, M.D., Bolivar, was installed as the 25th president of the Missouri Academy of Family Physicians at the Annual Scientific Assembly on Nov. 4, 1972 at the Lodge of the Four Seasons, Lake Ozark.

Other newly-elected officers of the Missouri Academy are Drs. Walter J. Stelmach, Kansas City, president-elect and Grover S. Patterson, Carthage, vice-president. Three Board of Director members who were elected are Drs. Irving H. Clark, Kansas City; David W. Hall, Springfield; and Lois C. Wyatt, St. Louis.

More than 200 Missouri family physicians and medical students attended the 1972 scientific session. The MAFP meeting also attracted officers from the Iowa, Illinois and Ohio Academies of Family Physicians.

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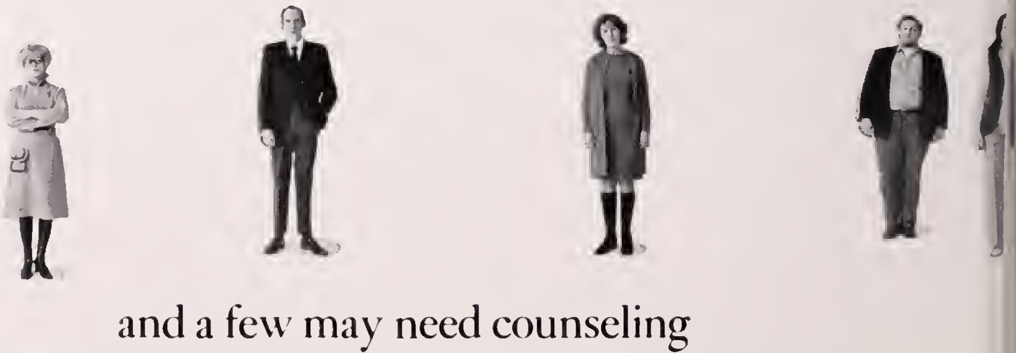

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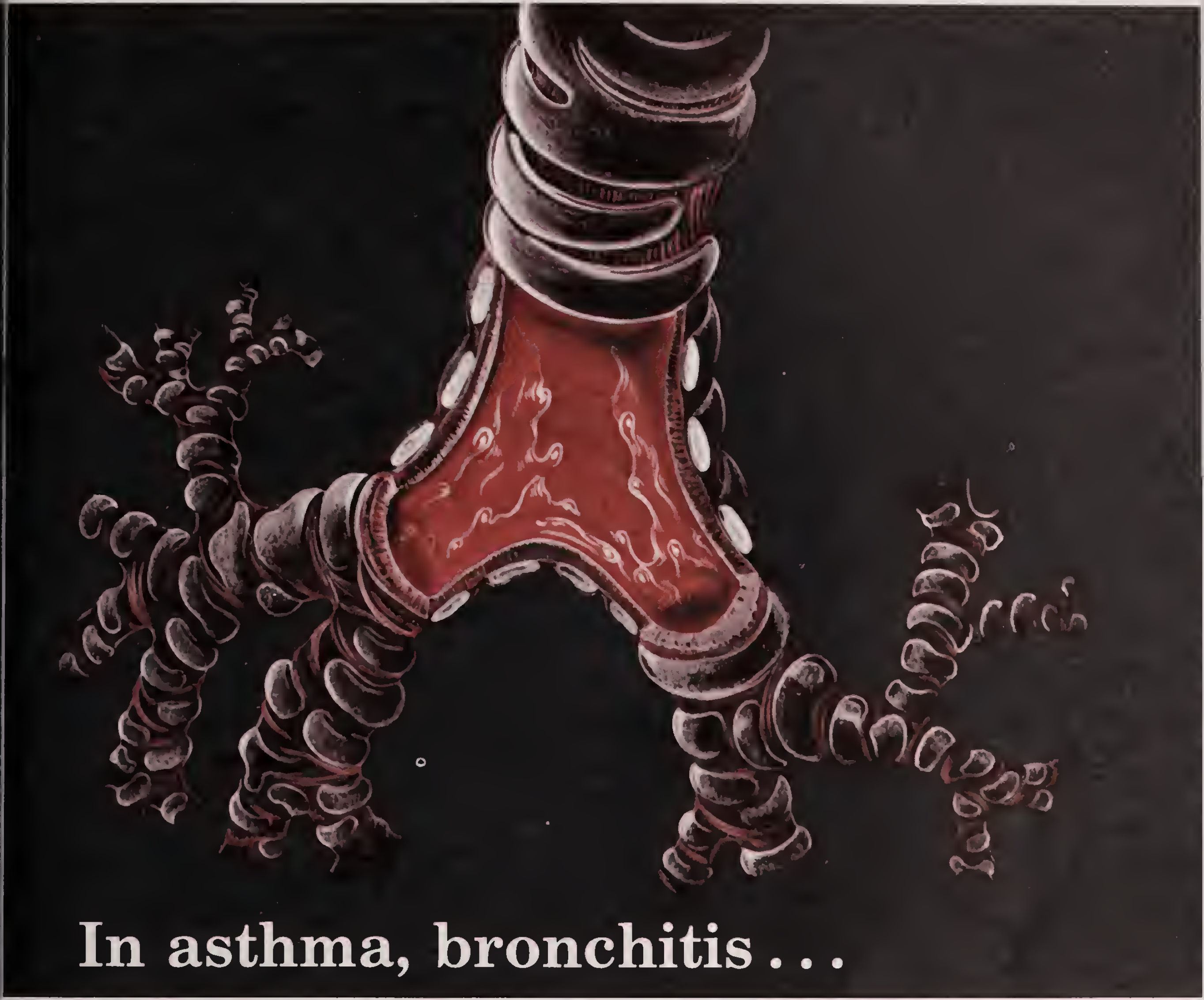

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OPHTHALMOLOGY: Iodo-Niacin has been reported to be of value in retinal and vitreous hemorrhages. The mechanism of action is unknown, but absorption of the hemorrhagic areas has been observed following use of this drug. It is also reported to be of value in reducing or removing vitreous floaters.

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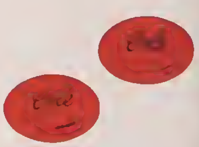
References: 1. Itkin, I. H., Am. Fam. Phys. 4:83, 1971. 2. Feinberg, S. M., Consultant Sept., 1971, pg. 32. 3. Bookman, R., Ann. Allerg. 29:367, 1971.



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Preliminary Program

115th Annual Session

MISSOURI STATE MEDICAL ASSOCIATION

Chase-Park Plaza Hotel, St. Louis March 29-April 1, 1973

Thursday, March 29

11:00 AM Registration of Delegates.
1:30 PM House of Delegates Meeting, opening session.
3:30 PM Reference Committee Meetings.

Friday, March 30

8:00 AM Registration.
9:00 AM General Session.
Introduction: Walter T. Gunn, M.D., St. Louis, MSMA President.
Speakers: Congressman James W. Symington, D-Missouri.
Congressman Tim Lee Carter, R-Kentucky.
10:30 AM Intermission to view exhibits.
10:30 AM *Clinical Allergy—Diagnosis and Treatment.*
Presiding: William T. K. Bryan, M.D., St. Louis, President, Missouri State Allergy Association.
Participants:
Welcome and Introduction, William T. K. Bryan, M.D.
Diagnostic Tests in Allergic Disease, Raymond G. Slavin, M.D., Associate Professor of Internal Medicine and Chief, Section of Allergy and Immunology, St. Louis University School of Medicine, St. Louis.
Hyposensitization, Ralph Hale, M.D., Department of Medicine, Wesley Medical Center and St. Joseph Hospital, Wichita, Kan.
Food Allergy in Alcoholics, George A. Ulett, M.D., Professor and Chief, Department of Psychiatry, University of Missouri School of Medicine, St. Louis.
Sponsored by Missouri State Allergy Association.
*11:00 AM *Newer Techniques in the Diagnosis and Treatment of Thyroid Disease.*
Moderator: Thomas F. Frawley, M.D., St. Louis.
Panel Participants:
John Lindeman, M.D., St. Louis.
Garrett Hagen, M.D., St. Louis.
Lewis Chase, M.D., St. Louis.
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.
*11:00 AM *Newer Aids in the Diagnosis of Connective Tissue Disease*, John D. Arnold, M.D., Kansas City.
Newer Treatments in Connective Tissue Disease, Jack Zuckner, M.D., St. Louis.
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.
*11:00 AM *Developmental Dyslexia and a Rational Approach to Management*, Norman E. Silberberg, Ph.D., Director of Research and Program Development, Kenny Rehabilitation Institute, Minneapolis, Minn.
Moderator: Warren A. Weinberg, M.D., St. Louis.
Panel Discussants:
Philip R. Dodge, M.D., Professor and Chairman, Department of Pediatrics and Professor of Neurology, Washington University School of Medicine, St. Louis.
Richard Burnett, Ed.D., Professor of Education and Director of the Reading Clinic, University of Missouri-St. Louis.
Warren A. Weinberg, M.D., Assistant Professor, Department of Pediatrics and Neurology, Washington University School of Medicine, St. Louis.
Manic-Depressive Illness in Children: Recognition and Treatment, Warren A. Weinberg, M.D., St. Louis.
Sponsored by Missouri Chapter, American Academy of Pediatrics.

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* Concurrent Sessions.

°11:00 AM *Psychiatric Sequelae of Vasectomy.*
Moderator: Ralph L. Biddy, M.D., St. Louis.
Panel Participants:
I. M. Thompson, M.D., Professor and Chief, Department of Urology, University of Missouri, Columbia.
Gilbert Ross, Jr., M.D., Department of Urology, University of Missouri, Columbia.
(Additional panelists to be announced.)
Sponsored by Missouri Psychiatric Association and Missouri Academy of Psychiatry.

°11:00 AM *Program on Surgery,* Sponsored by Missouri State Surgical Society.

12:30 PM Missouri University Alumni Luncheon.
Youth and School Committee, Missouri Chapter, American Academy of Pediatrics Luncheon. (Open to all physicians.)
Missouri Academy of Psychiatry Luncheon.
Maternal Welfare Luncheon. Missouri Obstetrical-Gynecological Society.

° 2:00 PM *Clinical Allergy—Diagnosis and Treatment* (Continued).
Presiding: Orval R. Withers, M.D., Clinical Professor of Medicine Emeritus, University of Kansas School of Medicine, Kansas City, Kan.
Participants:
37 Years of ENT Allergy, George E. Shambaugh, Jr., M.D., Emeritus Professor of Otolaryngology, Northwestern University School of Medicine, Chicago, Ill.
Allergic Middle Ear Disease, Jack D. Clemis, M.D., Associate Professor of Otolaryngology, Northwestern University School of Medicine, Chicago, Ill.
The Effect of Allergy on the Nervous System, Frederic Speer, M.D., Director, Pediatric Allergy, University of Kansas Medical Center, Kansas City, Kan.
Adrenergic Theory of Bronchial Asthma, Charles W. Parker, M.D., Professor of Medicine, Division of Immunology, Washington University School of Medicine, St. Louis.
Panel—Entire Faculty—Allergy—Questions and Answers.
Moderator: James W. Willoughby, M.D., Lecturer in Medicine, University of Missouri-Kansas City School of Medicine.
Sponsored by Missouri State Allergy Association.

° 2:00 PM *The Management of Chronic Renal Failure.*
Moderator: John Maher, M.D., Columbia.
Panel Participants:
Robert Cuddihee, M.D., St. Louis.
Herbert Lubowitz, M.D., St. Louis.
Thomas T. Crouch, M.D., Kansas City.
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.

° 2:00 PM *Hypoglycemic Agents Revisited,* Marvin E. Levin, M.D., Assistant Professor, Clinical Medicine, Washington University School of Medicine, St. Louis.
Hyperlipidemia: Its Significance and Management, Neville Grant, M.D., Assistant Professor, Clinical Medicine, Washington University School of Medicine, St. Louis.
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.

° 2:00 PM *Abdominal Pain and Multiple Surgery—A Psychosomatic Condition?*
Moderator: Ralph L. Biddy, M.D., St. Louis.
Panel Participants:
David Davis, M.D., Professor of Psychiatry and Associate Chairman, Department of Psychiatry, University of Missouri School of Medicine, Columbia.
Richard T. Quick, M.D., Assistant Professor of Psychiatry, St. Louis University, St. Louis.
Richard L. Sterkel, M.D., Gastroenterologist, St. Louis.
W. E. Bazzoui, M.D., Clinical Director, Mid-Missouri Mental Health Center, Columbia.
Sponsored by Missouri Psychiatric Association and Missouri Academy of Psychiatry.

° 2:00 PM Program on Surgery Sponsored by Missouri State Surgical Society.
3:30 PM Intermission to view exhibits.
4:00 PM **House of Delegates,** second session.
5:30 PM Missouri State Medical Foundation Annual Meeting.
6:00 PM Reference Committee Meetings.
6:00 PM Dinner Meeting: Missouri State Allergy Association.

° Concurrent Sessions.

6:30 PM Dinner Meetings:
Missouri Psychiatric Association and Missouri Academy of Psychiatry.
Speaker: Warren Williams, M.D., Speaker-Elect, Assembly of District Branches of the American Psychiatric Association, Tucson, Ariz.
Subject: *"The Structure, Objectives and Current Alternatives for the APA."*
Missouri State Surgical Society—University Club.

Saturday, March 31

8:00 AM Registration
* 9:00 AM *Whither Medicine.*
Moderator: Maxwell G. Berry, M.D., Kansas City.
Participants:
Assurance of Quality by Knowledge and Performance or—How Else?, Edward C. Rosenow, Jr., M.D., Executive Vice-President, American College of Physicians, Philadelphia, Pa.
Dynamic Reform in Graduate Education and Credentialing, Robert A. Chase, M.D., Chairman, Graduate Education Committee, American College of Surgeons and Emile Holman Professor of Surgery and Chairman, Department of Surgery, Stanford University School of Medicine, Stanford, Calif.
The New Economics of Health Care, William B. Hildebrand, M.D., Chairman, Council on Medical Services, American Medical Association, Menasha, Wis.
* 9:00 AM *Postoperative Respiratory Care*, Henrik Bendixen, M.D., Professor and Chairman, Department of Anesthesia, University of California, San Diego, Calif.
Moderator: Robert W. Vaughan, M.D., St. Louis.
Sponsored by Missouri Society of Anesthesiologists.
10:30 AM Intermission to view exhibits.
10:30 AM *Health Care Team Concept—Spinal Cord Injury System.*
Moderator: Saul Boyarsky, M.D., St. Louis.
Participants:
Franz U. Steinberg, M.D., Chief of Physical Medicine and Rehabilitation, Jewish Hospital and Assistant Professor of Medicine, Washington University School of Medicine, St. Louis.
Simon Horenstein, M.D., Professor and Chairman, Department of Neurology, St. Louis University School of Medicine, St. Louis.
Henry G. Schwartz, M.D., Professor and Head, Division of Neurosurgery, Washington University School of Medicine, St. Louis.
Saul Boyarsky, M.D., Professor and Head of Division of Urological Surgery, Washington University School of Medicine.
(With invited discussants)
*11:00 AM *Medicine, Surgery, Anesthesia and Hepatitis*, David M. Little, Jr., M.D., Staff Anesthesiologist, Hartford Hospital, Hartford, Conn.
Moderator: Robert W. Vaughan, M.D., St. Louis.
Sponsored by Missouri Society of Anesthesiologists.
*11:00 AM *Symposium on Chemotherapy.*
Moderator: Andrew McCanse, M.D., Kansas City.
Participants:
Joel L. Zeffren, M.D., St. Louis.
Virgil Loeb, Jr., M.D., St. Louis.
Reginald P. Pugh, M.D., Columbia.
Sponsored by Missouri Division, American Cancer Society.
*11:00 AM *Newer Approaches to the Management of Coronary Artery Disease.*
Moderator: G. Charles Oliver, M.D., St. Louis.
Panel Participants:
Alexander S. Geha, M.D., St. Louis.
J. Gerard Mudd, M.D., St. Louis.
Jon Cooksey, M.D., Assistant Professor of Preventive Medicine and Medicine, Washington University School of Medicine, St. Louis.
Richard B. Whiting, M.D., Assistant Professor of Medicine, St. Louis University School of Medicine, St. Louis.
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.
*11:00 AM *The Problem of Diabetic Retinopathy*, Francis A. L'Esperance, M.D., Assistant Professor of Clinical Ophthalmology, Columbia University College of Physicians and Surgeons and Director of John A. Hartford Laser Laboratory, New York, N. Y.

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* Concurrent Sessions.

Moderator: Anwar Shah, M.D., St. Louis.
Panel Discussants:
Isaac Boniuk, M.D., St. Louis.
King Y. Lee, M.D., Assistant Clinical Professor of Ophthalmology, University of Missouri, Kansas City.
Anwar Shah, M.D., St. Louis.
Sponsored by the Missouri Ophthalmological Society, Inc.

*11:00 AM Physician Fees.
(Participants to be announced.)

12:30 PM **MSMA General Luncheon.**
Guest Speaker—James H. Sammons, M.D., Vice Chairman, Board of Trustees, American Medical Association, Baytown, Tex.
Fifty-Year Club Luncheon.
Missouri Ophthalmological Society, Inc., Luncheon.
Missouri State Society of Neurological Surgeons Luncheon.
Physiatrists Luncheon.

1:30 PM *Diagnostic Radiology in Obstetrics and Gynecology,* Lawrence A. Pilla, M.D., Assistant Clinical Professor of Radiology, St. Louis University, St. Louis. (This program is of general interest.)
Moderator: William H. McAlister, M.D., St. Louis.
Sponsored by Missouri Radiological Society.

* 2:30 PM *Cutaneous Manifestations of Internal Disease,* W. Mitchell Sams, Jr., M.D., Professor and Head, Division of Dermatology, University of Colorado Medical Center, Denver, Colo.
Moderator: Norman Asel, M.D., Columbia.
Sponsored by Missouri Dermatological Society, Inc.

* 2:30 PM *Cerebrovascular Disease and the Management of the Post-Phlebitic Extremity.*
Moderator: Albert M. Estes, M.D., Cape Girardeau.
Participants:
Pathogenesis and Diagnosis of Cerebral Ischemia, William S. Fields, M.D., Professor of Neurology, University of Texas Medical School, Houston, Tex.
Surgical Management of Cerebrovascular Insufficiency, Jesse E. Thompson, M.D., Clinical Professor of Surgery, University of Texas Southwestern Medical School, Dallas, Tex.
The Management of the Post-Phlebitic Extremity, Charles R. Doyle, M.D., Professor of Clinical Surgery, St. Louis University School of Medicine, St. Louis.
Sponsored by Missouri Heart Association, Inc.

* 2:30 PM *Program on Surgery,* Sponsored by Missouri State Surgical Society.

* 2:30 PM Value of Periodic Physical Examinations.
(Participants to be announced.)

* 2:30 PM Physician Assistant.
(Participants to be announced.)

3:00 PM *Radiology of Total Hip Replacement,* Tom W. Staple, M.D., Associate Professor of Radiology, Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis.
A Roentgen Approach to GI Obstruction in Children, Gary D. Shackelford, M.D., Instructor in Radiology, Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis.
Necrotizing Enterocolitis, John C. Leonidas, M.D., Kansas City.
Moderator: William H. McAlister, M.D., St. Louis.
Sponsored by Missouri Radiological Society.

4:00 PM Intermission to view exhibits.
5:00 PM St. Louis University Medical Alumni Cocktail Party.
5:00 PM Washington University Medical Alumni Cocktail Party.
Missouri Dermatological Society, Inc., Cocktails and Dinner (Courtesy of Westwood Pharmaceuticals)—St. Louis Club, Pierre Laclede Center, 7701 Forsyth, Clayton.
6:30 PM Social Hour for those Attending Banquet.
7:15 PM Annual Banquet in Honor of Past-Presidents.

Sunday, April 1

7:30 AM House of Delegates, breakfast and final session.
Autoimmune Dermatologic Diseases, W. Mitchell Sams, Jr., M.D., Professor and Head, Division of Dermatology, University of Colorado Medical Center, Denver, Colo.—Wohl Clinic, 5th Floor, Washington University School of Medicine, 4950 Audubon.
Sponsored by Missouri Dermatological Society, Inc.

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* Concurrent Sessions.

Medicine Over There?

Local Society Goes to the Experts

JOHN JOHNSTONE, M.D., ***St. Louis***

"Probably the most important tool of the committee is the general experience of its members: their familiarity with their country of origin, their ability to discern what is going on beneath the surface among the people of their homeland." Originally published in Private Practice, *this article reports a unique approach to gaining informed opinions about "comparative health care delivery" by an Ad Hoc Committee of Foreign-Born Physicians of the St. Louis Medical Society.*

Although 1971 promised to be a year of much discussion, both in the Congress and in the nation at large, about health care delivery, the foreign-born physicians in our midst seemed to be largely untapped as a source of data and of informed opinion on the whole subject of "comparative health care delivery." With the aim of tapping this source and of pooling and using the experience of people who have lived with more than one health care delivery system, Dr. Lawrence W. O'Neal, then president of the St. Louis Medical Society, established an ad hoc committee of foreign-born physicians practicing in St. Louis. The committee met for the first time in May of last year.

Many of the health care proposals now before the nation have their counterparts actually operating in other countries. It seemed important, therefore, to explore the development of these successes and failures—and thus to maximize the good and steer clear of the bad in our own country.

There has been no identical parallel between any two countries, but there have been similarities—"syndromes," "side-effects," "epidemiology," loopholes and malfunctioning. The hope of the committee was to delineate these similarities and inform the doctors, the community and the nation in a constructive way. There have also been "prodromals," underlying circumstances and developments in a nation's life and history at large, which tended to foster or discourage this or that health care system. All this the committee hoped to assimilate, to digest and to spell out in usable form—showing why, for example, if a program worked in Germany, it wouldn't work in Italy; or why, if it worked in both Germany and Italy, it wouldn't work in England; or why, if it worked in Italy in 1950, it does or doesn't work there in 1972.

Probably the most important tool of the committee is the general experience of its members: their familiarity with their country of origin, their ability to discern what is going on beneath the surface among the people of their homeland. Fluency in the language, keeping up with literature and radio reports, contacts by mail, visitors from home and trips back home kept our members knowledgeable about the current state of affairs in their particular homelands.

A typical meeting of our committee would have, for example, a member from West Germany explaining the West German system—the system's historical development, its effects on the community, what a physician might do in this or that situation, what a patient might do, what a nurse or pharmacist or hospital administrator might do, what the federal financing and rule-making "third party" might do. From time to time, a round-table repartee would spring up as a physician from another country would interject, "In my country it wouldn't happen like that, but would happen like this: . . ." Then an illustrative anecdote might be presented, and a contrasting one, illustrating a typical happening in some third country, might follow. Sometimes the speaker would be a guest rather than a regular member. Some guests have been physicians, and some have been laymen. We decided to tape our meetings and to have them transcribed. We are building a reference bibliography, tapes, etc., and have recently begun public appearances and broadcasts as we have reached the point where we can speak with some authority to the public.

We think a committee like ours is worth establishing elsewhere around the country; if others exist, we would like to be in touch with them.

Our committee also has native American members. For, as one foreign-born member said, "I've been in America for 20 years, and there are still plenty of things that I don't understand about Americans." Native-born members supply, where needed, that same element of understanding about the U. S. that immigrant members supply about their country of origin.

What have we learned so far? For one thing, we have learned that no two countries are alike. Each has its own tradition, its own history and expression, its own factions and subgroups, its own personalities and leaders, which would help explain why a particular system works or does not work, and why, when you "transplant" a system from country A to country B, you get a "take" or a "rejection" by the "host" country.

We have learned that a monopolist Establishment for health care works poorly compared to our pluralist "non-system," has much inertia, and that once something is legislated, you're likely to be stuck with it for a long time, with no prompt internal tendency for self-improvement and correction.

With rights go responsibilities, but in the foreign systems that we have studied, the patients have rights but no responsibilities and the physicians have responsibilities but few or no rights. The third party, the State, is supposed to regulate this potential for imbalance, but it fails to do so, and the systems become unwieldy, routinized, and mediocre.

We have learned that in some countries, a person need not fear lack of medical care because he lacks money—no small comfort, yet with sacrifice of other boons. We have learned that in country after country, from Russia to England, VIPs get superior medical care and personalized attention while the mass of people stand in line and get "clinic" type care. While it is true that in the U. S. persons of privilege have access to better care (just as in all other countries), the percentage of Americans with this access is much higher than anywhere else. In Italy, top medical care is available to around 3% (the wealthy) and in the USSR to around 5% (the Party elite and higher officials).

We have learned that the intimate doctor-patient relationship is repugnant to Communist governments because it encourages private secret-keeping which thwarts the re-tailoring of society.

We have had the opportunity to learn about the day-to-day practice of medicine under various systems. Take, for example, the management of myocardial infarction in England:

In England, we learned, a high percentage of myocardial infarctions are treated in the home, without benefit of EKG or enzyme levels. Very few British GPs have EKG machines in their offices, nor do they feel financially able to buy them, nor do they have the incentive to become proficient in the use of them. If a patient is obviously too sick to be cared for at home, he passes out of the GP's hands (except in rural areas) to go to the hospital. There, in the hands of specialists, he gets the coronary care that we know here. All those "not so sick" cases who suddenly go into an arrythmia and would be salvaged on a monitor in coronary care units in the U. S. simply take their chances at home if they live in England.

The English GP, we learned, sees patients on office visits averaging three minutes per visit and refers them to specialists if they require more diagnostic time and study than that. Thus, the English GP comes to be more and more of an in-take screening station, with less and less experience in managing many types of cases. Our committee members and guest speakers have repeatedly likened the competence and know-how of the European GP to that of an RN in the U. S.

These observations are particularly true concerning medicine in England, West Germany, Austria, Italy and, to a lesser extent, Switzerland —with all of which we have had some modicum of first-hand contact. One of our members is now teaching in Australia, and we look forward to hearing from him on his return. We know of Canadian medicine only through coverage in the press—especially concerning the situations in Quebec[1] and Saskatchewan.[2] We know locally no physicians from Canada who are in touch with the current health care scene in Canada.

. We know about Scandinavian medicine only indirectly. We have no physicians available to us who have emigrated from Scandinavia. Does this mean that physicians in Scandinavia like it so well that they don't emigrate? Is theirs the system we need, and would it work here? The answer to these questions is probably No (see Biörek[3]), but we would like to know much more and would be grateful for contact with sister committees which have member physicians from Scandinavia. We would also like first hand information about medicine in France, Israel, Mexico and the Benelux countries. (Other countries, such as the Philippines, Thailand, India, Pakistan and Iran, have substantially different contexts, and their experience does not seem applicable to the U. S.).

Social insurance, including government-financed medical insurance, began in Bismarck's Prussia in the 1880s, and from there spread to other countries with autocratic regimes—Austria-Hungary, Czarist Russia, Portugal, Romania. (Palyi, p. 143) It was only later that it began to be advocated in democratic countries undergoing industrialization—and for a complex interplay of reasons. A person's conception of how health care should be provided does not exist in a vacuum unrelated to his other attitudes—about economics, politics, society, technology, religion, life and death in general.

Repeatedly, Socialist governments have come to power and "solved" the "problem" of physicians as a "class," without distinction as to good, bad, or mediocre individuals among them, without consulting the physicians, without knowing what ethics, invisibly pledged in terms of Hippocratic or Talmudic or Gospel precepts, might inwardly govern the particular physician. Medicine as a "class" thereafter has unfailingly become mediocritized, because its ethical responsibility has been forcibly changed to an "ethic" responsible to "the people" as a class to the "health care consumer" as a class, to the State, or the Party, or the Ministry of Health, or the Regional Health Supervisor.

Bismarck was the author of modern state medicine. The old craft guilds had previously supplied medical insurance to their membership, and had been (to Bismarck) unpleasantly powerful and independent. These guilds were on their way out, and Bismarck hoped that by supplying that function himself he could curtail the power of the newly emerging industrial magnates and unions.

Lenin admired Bismarck's administrative system very much and imitated it in setting up his Socialist Soviet administration—but for different purposes. The idea was to have no center of power or thought independent of the State.

The results of these concepts can be seen in the various systems set up in various countries during the past three-quarters of a century.

It is hardly possible, without awareness of these historical roots and ideological backgrounds, to grasp the currents and developments of which "health care delivery" formulas are but one manifestation. Palyi[4] sketches well the historical scope of state involvement in health care and gives good bibliography for getting into the writings of those friendly and those unfriendly to it. These historical backgrounds are woven into the experience of our committee members.

References

1. Robillard, Raymond, M.D.: Medicare, the M.D.s and You! 1130 Lagauchetiere East, Montreal, P.Q., Canada, Imprimerie Electra, 1970, p. 126.
2. Good, Paul H., M.D.: A Lesson North of the Border. Private Practice 3(11):39-56. Nov. 1971.
3. Biörck, Gunnar, M.D.: An Insider's View of Medicine in Sweden. Mod. Med. 39(16):40-51, Aug. 9, 1971.
4. Palyi, Melchior: Compulsory Medical Care and the Welfare State. Chicago, Ill., The Heritage Foundation, Inc. (formerly the National Institute of Professional Services, Inc.), 1949, pp. 156.

Comment by Joseph C. Ungvari, M.D., St. Louis:

There are some points upon which most if not all members of the committee agree. They all came to this country of their own free will, rather than from political pressure or economic need. They had reasonably good incomes in their native countries. When they came here, they were not motivated by desire for financial gain, but rather by the hope of practicing medicine the best way they felt it should be done, free from the interference of a third party. For this freedom, they took upon themselves the difficulties of giving up families, resettling, learning a new language, wrestling with the licensing boards of the different states and, at times, fighting the prejudices of colleagues and patients. But they did not regret their actions.

What they *do* regret is observing the way the practice of medicine is heading in America, toward "third party" interference, just as in the countries they left behind.

The active members of the committee are all proud of their national heritage and the contributions which were given to the U. S., or to the world, by their respective nations. But they love their new, adopted country, and they wish to serve it by pointing out the mistakes made by others and by giving an honest and constructive criticism. They wish to avoid the same mistake here. Our doctors are good citizens and have their lives tied strongly now to the U. S., and they feel that what is good for the country is good for them, and what is bad for the country is bad for them, too.

The doctors of the committee have repeatedly stated that one can get excellent care in other countries, if the person needing care could have the services of professors or other leading medical authorities, and had unlimited financial means, but that the "average person" receives the best medical care in the U. S. Under the existing circumstances, if our committee members would have to be sick, they emphatically would prefer to be sick in the U. S.

(Continued on page 74)

ADDENDUM:

A fifth item in bibliography should be:

Lynch, Matthew J., M.D. and Raphael, Stanley S., M.B.: Medicine and the State. Springfield, Ill., Charles C Thomas, 1963. Libr. Cong. 63-9640. Pp. xxviii-449.

Lynch and Raphael is a general reference, similar to Palyi. Palyi is out of print. Lynch and Raphael is current. Palyi gives large access to Continental literature, while the majority of Lynch and Raphael's bibliography is in English.

—Reprinted with permission from the September, 1972 issue of *Private Practice*.

Service Provides Professional Help in Fighting Drug Abuse

A new service for communities in the education, prevention and treatment of drug users has been formed in Phoenix, Ariz. The service, called Community Organization Institute, is designed specifically to provide professional assistance to cities, communities, medical societies and private groups in implementing a coordinated program based on the highly successful CODAC (Community Organization for Drug Abuse Control) which has been proclaimed as a model for the nation by experts.

COI is able to provide valuable assistance in every phase of a drug program including organization structure, community awareness, systems design, fund raising and governmental contracts. For further information, contact Community Organization Institute, 905 Financial Center, 3443 North Central Ave., Phoenix, Ariz. 85012.

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PRESCRIBING INFORMATION
Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.

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Clean sweep

PINWORMS 0
ROUNDWORMS 0
STAINS 0
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Simple dosage with a gle-dose regimen: 1 cc. per lb. body weight (1 tsp./50 lb.; ximum dose, 4 tsp.)

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*Data on file at Roerig.

Please see prescribing information on facing page.

The Council Reports

Meeting of Dec. 9-10, 1972

James C. Cope, M.D., Columbia, Chairman, called the meeting to order. Those present were Drs. Cope; Walter T. Gunn, St. Louis; E. A. Stricker, St. James; John I. Matthews, Jefferson City; Charles R. Gulick, St. Louis; Gerald L. Miller, Kansas City; John N. Martin, St. Joseph; Lysle M. Bach, Hannibal; Max S. Franklin, St. Louis; Louis P. Hetlage, Troy; William D. Bradshaw, Clinton; R. Allen Chandler, Kansas City; Howard J. McAlhany, Springfield; Claude W. Cooper, Thayer; Eugene T. Hansbrough, Poplar Bluff; Hector W. Benoit, Jr., Kansas City; Stanley S. Peterson, Springfield; J. Loren Washburn, Versailles; Samuel B. Guze, St. Louis; George A. Thoma, St. Louis; William D. Mayer and William C. Allen, Columbia; Allen Klippel, St. Louis; Paul R. Young, Columbia; Melvin Kasten, Cape Girardeau; Arthur Rikli, John Maher, Helen Yeager, Columbia; Mrs. Keith D. Jones, Warrensburg; Mrs. Jackie Watson, St. Louis; Messrs. Lee Mortenson, Chicago, Ill.; John Noble, Kennett; Allen D. Smith, Kansas City; Hollister S. Smith, St. Louis; Gary L. Schnedler and Max Lilley, Springfield; Mark Halvorson, Jefferson City; Ray McIntyre, Tom P. Fox, Royal O. Cooper and C. C. Swarens, Staff.

Chairman Cope called the meeting to order and requested approval of the minutes of the Sept. 16-17, 1972 Council meeting. Dr. Hetlage indicated that due to several objections, he had withdrawn the statement regarding organized medicine which appeared in the Councilors' copy of the minutes and would discuss this further during his Councilor District report. On motion, duly seconded, the Council minutes as published in the Journal were accepted.

REPORT OF THE EXECUTIVE SECRETARY

Mr. McIntyre reported that Dr. Bach had represented the Missouri State Medical Association at the services for Dr. W. F. Francka, Hannibal, a Past-President of MSMA, who passed away recently. The Association sent flowers.

A note of thanks has been received from Mrs. Shattyn, widow of Dr. Martyn Shattyn, thanking the Association for the "In Memoriam Perpetuum." This tribute, signed by the MSMA President and the Executive Secretary, is sent to the families of deceased members.

Mr. McIntyre read a short note from Dr. George Ulett expressing his appreciation for the letter the Association sent when he resigned as Director of the Division of Mental Diseases. Dr. Harold Robb has been appointed as the new Director.

A letter was written to the AMA to find out why the AMA did not appear before the Kennedy Subcommittee on Health regarding HMO legislation on June 22, 1972. The reply pointed out that the AMA had reported to the committee on various other occasions.

The Councilor from District #6, Dr. Bradshaw, has been elected Vice-President of the State Board of Health.

A letter to John R. Smart, Ph.D., Central Methodist College, from Dr. Charles A. Worley, Chairman, MSMA Ad Hoc Committee on Health Manpower, regarding a "Community-Based Educational Manpower Project in Rural Mid-Missouri" was read. This letter indicated that the Committee had given unanimous approval in principle to the proposed project and further stated that the action of the committee was subject to official confirmation of the Council.

Motion was made to accept this Committee report. Motion was seconded and carried with one dissenting vote.

Mr. McIntyre stated that a news release was written regarding the stand the Council had taken on acupuncture at its September meeting. Prior to release, the Board of Healing Arts had taken action on this matter. Unfortunately, this was not known to the Association. Many times, press releases are misinterpreted, and the MSMA office has received many inquiries seeking physicians who will perform acupuncture.

In September the Missouri Ear, Nose and Throat Association, Inc., a statewide organization, was formed. The Association has asked the MSMA to recognize this organization on the Interspecialty Commission for otolaryngology. On motion of Dr. McAlhany, duly seconded, it was agreed that the Council accept the request of this group and that the organization becomes a member of the Interspecialty Commission.

Dr. Allen gave a short report on the meeting of the National Joint Practice Commission which he attended on November 9-10 in Atasca, Ill. at Dr. Worley's request.

Dr. Allen said he was pleased to represent the MSMA at the meeting. He stated that the impetus for establishment of the National Joint Practice Commission came from the National Commission for the Study of Nursing and Nursing Education for the purpose of promoting involvement of physicians and nurses in a cooperative effort to develop further the role of medicine and nursing to effect better health care. Both the president of the American Nurses Association and the president of the American Medical Association addressed the group. AMA President Hoffman pointed out that while the AMA supported the National Joint Practice Commission, he felt that the states were the laboratories for exploring and testing the expanded roles for nurses, as well as new mechanisms and roles of physicians and nurses working together in the private practice setting. A list of objectives were distributed to the participants. To date, 26 states have established Joint Practice Committees and others have Liaison Committees or some other form of formal liaison between physician and nurse organizations. Only two states have no structure for formal relationship between the two organizations. There were small group sessions for the major portion of the Conference with an opportunity for all attendees to participate.

Dr. Allen called attention to a booklet entitled, "The Physician's Assistant—Today and Tomorrow." He felt that it is well worth reading. The price of the book is $3.95 and can be obtained from the County Mailing

Service, Inc., Sawmill Road, Westhaven, Conn. 06516. On motion, duly seconded, the report given by Dr. Allen was accepted.

Mr. McIntyre stated that a letter had been received from the AMA regarding its National Leadership Conference to be held on Feb. 16-18, 1973. Discussion followed regarding which MSMA officers should attend this conference. On motion, duly seconded, it was agreed by the Council that the President-Elect, Chairman of the Council, Vice-Chairman of the Council and Executive Secretary should attend this National Leadership Conference.

REPORT OF LEGAL COUNSEL

Mr. Noble reported that the Health Care Foundation of Missouri case is set for trial on January 15, 1973. He indicated that he and Mr. Carson, Legal Counsel for the Health Care Foundation, are working on the details for the trial and will be in touch with those members of the Council whose presence they consider necessary at the trial.

Chairman Cope introduced and welcomed Dr. Melvin Kasten, Cape Girardeau, President of the State Board of Registration for the Healing Arts.

The Chairman added an item to the agenda regarding a Building Committee Report for Sunday.

REPORT OF THE TREASURER

Dr. Gulick presented the Treasurer's Report. He reviewed the figures shown in the Treasurer's Account, minus the accounts payable, which left a balance on hand of $40,214.89 as of Dec. 1, 1972. This does not include the investment account (at cost) of $125,733.91.

On motion of Dr. Gunn, duly seconded, the Treasurer's Report was approved.

REPORT OF THE BUDGET COMMITTEE

The Budget Committee met on Friday afternoon, December 8, prior to the Council meeting on Saturday. The Committee reviewed the material presented which showed Exhibit A—Actual Income through October 31, 1972; Expected Total Income for 1972; Income Budget for 1972 and Estimated Receipts for 1973. Exhibit B—Actual Expenditures through October 31; Estimated Expenditures for 1972; Budget for 1972 and Proposed Budget for 1973. Exhibit C—Actual Meeting and Committee Expenses through Oct. 31, 1972; Estimated Expenses for all of 1972 and Proposed Budget for 1973. A breakdown of anticipated income and expenses for the year 1972 was also included.

Dr. Gulick indicated that he felt the proposed budget for 1973 is practical and within anticipated income. He further stated that the Budget Committee recommends that for 1973, the interest from the Investment Fund be placed into the operating fund rather than being reinvested.

Dr. Gulick indicated that the building for the Missouri State Medical Association headquarters office has been paid for. However, this money did not come out of current income. The Budget Committee commended the AMA Delegates for the great job they have done and wanted them to know that their efforts are appreciated.

Dr. Gulick stated that at the April, 1972 Council Meeting, the Council recommended that the MSMA give $100 to each of the four SAMA (Student American Medical Association) organizations in the state in addition to the $100 donation to the National SAMA. This has been budgeted and will be done this next year. The following proposed budget was approved for 1973:

Salaries	$125,520.00
Furniture & Fixtures	500.00
Office Rent & Lights (Four months present office)	2,560.00
General Expense	3,900.00
Office Supplies	4,800.00
MSMF Assessment	39,340.00
Journal Expense	48,500.00
Postage	4,700.00
Equipment Rentals & Repairs	2,300.00
Telephone & Telegraph	8,000.00
Pension Expense	21,000.00
Legal & Professional	9,500.00
Payroll Taxes	5,502.00
Commission-Committee Meetings	38,100.00
Annual Session	18,500.00
Car Lease and Expense	2,300.00
Taxes—IRS	500.00
Travel Expenses	5,500.00
New Building Expense (Operating)	12,735.00
Total	$353,757.00

On motion of Dr. McAlhany, duly seconded, the report of the Budget Committee was accepted.

REPORT OF THE PRESIDENT

The Council's attention was called to the December 4 issue of the *AMA Newsletter* which states that a program entitled "What Price Health?" will be aired by NBC-TV on December 19 at 9:00 CST.

Governor-Elect Bond has been invited to be the banquet speaker at our 115th Annual Session of MSMA. Mr. Bond is not accepting engagements this far in advance and should receive a repeat invitation 60 days in advance of the speaking engagement. Dr. Sammons, a member of the AMA Board of Trustees, will be on the program of the Annual Session.

A recent opportunity to sit in on the giving of examinations by the Board of Registration for the Healing Arts was offered to Dr. Gunn. He felt that the examinations were well conducted.

The Texas Academy of Family Physicians has a program called "Doctor for a Day." This program, in essence, calls for a physician to be in the Capitol during the time when the General Assembly is in session. Dr. Koon, President of the Missouri Academy of Family Physicians, will try to start such a program for Missouri.

The MSMA has received a letter from a special committee of the University of Missouri-Columbia requesting the names of any physician or physicians recommended to fill the newly-created position of Provost for Health Affairs. Dr. Allen explained that the Board of Curators had approved creation of this new position and the Chancellor had appointed a committee that is in the process of describing the role of the provost and the type of individual needed to fill this position. Their charge is to present to the Chancellor and, subsequently, to the Board of Curators at least four candidates from whom one will be selected. Dr. Cope then appointed Dr. Bradshaw, Chairman; Drs. Chandler and Gulick as a committee to suggest a physician for the position of Provost. The Committee was asked to report on Sunday morning.

The AMA has requested appointments to the committee working with the Federal Food and Drug

Administration which is investigating drugs sold across-the-counter. Suggestions for these appointments were Drs. James O. Lottes, St. Louis; Richard P. Bowles, Liberty; and Albert D. Cross, Trenton.

Dr. Gunn reported that he had received a letter commending Mr. Tom Fox and thanking him for setting up the MECO program for next year.

COUNCILOR DISTRICT REPORTS

District #4—Dr. Hetlage reported that he had held his usual Councilor District Conference. However, it was not attended by a majority or quorum of the delegates, so there were no specific recommendations, but suggested reconsideration of some of those made previously.

Dr. Hetlage said that the Lincoln County Hospital staff, which represents part of the members of one of Dr. Hetlage's societies, had recommendations to make. One regarded automobile accidents. It is felt that the work being done by Dr. Klippel and his group perhaps does not include specifically those factors which apply to rural accidents. "We have recommendations to make that I feel are pertinent. Factors involved in the order of their frequency are highway engineering with specific regard to highway maintenance, highway markings, consistency of markings and consistency of lighting. Second, age of the drivers and their physical condition. We would suggest that the recommendation be made to the proper Commission to require compulsory examination, both physical and for competency, for those individuals over the age of 65. The third factor in importance is relative to drinking. We feel that permission to draw blood should be given and this should be included as a part of the signature on the drivers license." He further stated that they feel more time should be spent by the Highway Patrol in spot checking drunk drivers and less time on speeders. He further said that a great factor in his area is drivers who are fatigued and he indicated that they, too, might be spot checked by patrolmen. Dr. Hetlage asked that he be allowed to take these recommendations to the appropriate commission. No objections were raised.

The Council's attention was called to the entire situation relative to nursing home care. He stated that more attention should be given to appraisal and that he would talk with Dr. Bradshaw about this.

Dr. Hetlage reported that a significant meeting was held between the St. Charles County physicians and the local druggists. Matters of labeling and refill instructions were discussed. The druggists were not aware of the fact that the state has taken a stand on labeling of prescriptions. He pointed out that there is a serious problem on Sunday and holiday coverage in pharmacies. Dr. Hetlage said that he wanted to bring this to the Council's attention and recommended that this same meeting be conducted in other areas. Of 50 pharmacists invited to the meeting, 35 were in attendance.

Dr. Hetlage then brought up the subject of the statement which he voluntarily withdrew at the previous Council meeting regarding organized medicine and possible restructuring and changes. He said that it was a statement which was prepared carefully following the recommendation of the Councilor District Conference which consisted of a quorum of the delegates and officers of the Fourth District. He stated that he withdrew it and had each medical society approve it word for word. The remarks in that statement were not necessarily his, but the Councilor District's and they have approved it and asked that he present it and read it again into the minutes of this meeting. He indicated that there is no particular reference to any particular individual. Dr. Hetlage then read the following statement;

"It is not the District Councilor nor the Fourth District delegates, but a widespread opinion, that the structure of organized medicine needs changes which would put the profession into line with the social and economic, as well as governmental, pressures of the day. Physicians, particularly young physicians, at the grass roots level are speaking out on communications, participation, relevance and involvement within their profession. Many of these men feel that the structure of organized medicine fails to meet their needs for representation and involvement and either have become apathetic or have pressed their desire for change. There are those who feel that the hierarchy of medicine has ignored these cries and has resisted change until the degree of participation showed an alarming tendency to drop and that only now has the atmosphere become one receptive to change, change which should have been an ongoing process of an organization sensitive to the desires of those members who constitute the foundation of its being.

"As long as men are content to function within a set structure, there will be other men willing to place themselves in a position of jeopardy, to rouse those men into some kind of activity, be it positive or negative.

"Considerable thought has gone into recommendations to the delegates to the AMA from this district. No one has an answer. No one is willing to say that total revolution is an answer, but we do say that a careful examination of the structure is in order and that careful and relevant changes can and should be made.

"We feel that the AMA is not an entity unto itself. No. The AMA is state societies, composed of delegates, councilors, societies and grass roots members. We feel that change in the AMA should rightly begin at the county society level and extend through the state structure to ultimately be reflected on the posture and operation of the AMA.

"Of primary consideration, then, is the county medical society. Is it a relevant and effective political and educational unit? Would not the hospital staff, with its compulsory attendance and day to day liaison, be a more effective political unit?

"Care should be given to the position of delegate to the state convention. Is this job a meaningful one with opportunity for significant pertinent input, one to be sought after, or is it now a position to be filled by those who have nothing better to do than rubber stamp mostly meaningless resolutions? Is the quality of the delegate lower now than it would be if the job were a continuing one throughout the year, one to be sought after because of its responsibility and sensitivity?

"Are councilors seeking the job because they wish to have significant input and because they want to be representative of their districts? Should the job of councilor be a permanent position supported ad infinitum by the district who wants a president, or should his term be limited, so that fresh, new ideas would be forthcoming from younger men?

"Should the president always come from the Council or should the delegates have some voice in the selection from an open panel?

"Should the AMA Delegates be selected without limitation of tenure by a nominating committee with set instructions and elected without question by voice vote of a powerless house of delegates or should the AMA delegates be elected from an open slate proposed by an unrestricted nominating committee of responsible delegates?

"In other words, gentlemen, how is the grass roots member going to be properly represented to the AMA if he is not represented by a strong delegate organization, who actively seeks and pursues the job, who participates in district activities on an ongoing basis, and who have an active say in who will represent him as an officer of the state society and as a delegate to the AMA?

"The effect of a change to relevance on the part of the state conventions should have a noticeable effect upon the makeup of the AMA.

"Above that, we feel that younger but responsible men, both on a state and AMA level, should be used on commissions, committees and as alternate or subalternate representatives, recognizing the limitation of numbers within the delegate structure.

"We submit that the lines of communication from the top down should be further reinforced, that ongoing work at the AMA level be frequently reported by some appropriate means and that councilor district delegate meetings be kept informed as to those decisions which may be of relevance to the concerned physicians. In other words, the house of delegates has a reverse function, a reverse flow through the AMA delegates to the councilor district organization back to the local society.

"We submit that constructive thinking along these lines could lead to changes which would satisfy the thirst for representation among the members at the bottom."

Dr. Cope indicated that the above statement was sent to our AMA Delegates and Alternates prior to the Cincinnati meeting.

Lengthy discussion followed regarding the statement from the Fourth Councilor District. Communications is still the obvious problem and there was a suggestion made that the Councilors might ask for five minutes at hospital staff meetings to disseminate information. It was pointed out that where the information does not get back through publications, the Councilors should see that it does get to their areas. Should the Councilors have a budget for these purposes? It was indicated that one county invited hospital representation on its county society council. However, this effort failed as these hospital representatives did not attend the Council meetings.

Dr. Hetlage stated that he feels we need to stimulate the young physicians' desire to become involved in organized medicine. Many of them think the hierarchy of medicine doesn't really care about the relatively new physician. He stated that the key man program is certainly a valid one in hospitals. Many physicians feel that they are not represented in organized medicine. We need to make the job of state delegate an important one and not for just a couple of days a year.

Dr. Cope stated that he appreciated this report from the Fourth District, if only for its stimulating quality.

It was stated that not all physicians, young or old, want to become involved in organized medicine; many are just not interested and they have other interests.

It was brought out that many times young physicians who are just getting started in practice do not have the time to become involved in extra curricular activities. It takes several years to become interested. We need innovations, but perhaps the present system is not all bad.

Mr. Mortenson said that one AMA staff has four

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speaking engagements at various Missouri component society meetings within the next month. This is one means of communication. He indicated that Illinois has implemented the key man system. They also have instituted a bulletin on the most recent state and AMA innovations to be placed in every hospital every two to three weeks. Mr. Mortenson indicated that everyone wants to be heard and wants to know that someone is listening to them specifically. He further stated that he could bring to the Council material on other state communications systems. It was pointed out that, indeed if all of these communications are to be expedited, it is going to cost money.

Dr. Gunn stated that if we implement this key man concept in the 200 hospitals, he would suggest that the green sheet be reproduced. It is the greatest means the AMA has to reach its people with facts, figures and timely items.

Dr. Hetlage stated that the report is more stimulating than constructive. He said that in the last session, his District submitted a resolution regarding the medical profession speaking out on public issues and also submitted the one regarding Council Chairmanship. He said that in the report itself there are several things that are constructive: first make the delegate's job a more important one—one to be sought after; secondly, limit the terms of Councilors. He stated that the four main words in the entire report are "communications, participation, relevance and involvement."

Dr. Cope suggested that Dr. Hetlage might break this report down into separate resolutions which could be referred to the proper commission or committee for study and recommendations.

District #10—Dr. Hansbrough indicated that we may have gotten away from the original purpose of the box and check mark on the front of the Journal to call members' attention to a very important item. On motion of Dr. Hansbrough, duly seconded, the Council requests the Publication Committee to review the purpose of the check mark on the front of the Journal.

Dr. Hansbrough reported that on November 19, his Council District meeting was held in Farmington with a very interesting program. Our MSMA President and the President of the Woman's Auxiliary were present. At the request of the physicians in the District, we tried to bring up socio-economic problems; physicians foundations, that is, special care foundations; HMOs; CHP; and a most stimulating and provocative talk by a young psychologist who stated that mental illness is too important to have a physician deal with it. Apparently, this is the way some clinical psychologists feel. His general concept on how to treat people was very interesting.

Dr. Hansbrough stated that he enjoyed being in Springfield during Dr. Hoffman's visit there.

He said that one thing they found out in his immediate area is how the new controlled drug act is affecting the community. He stated they are having a difficult time with falsified prescriptions.

At this point, Dr. Cope indicated that the wives were invited to an informal talk on transactional analysis in the Chairman's suite on Sunday morning at 9:30 A.M.

District #9—Dr. Cooper reported that they have postponed their Councilor District meeting until after the first of the year. He said he had had the pleasure of going on the Caribbean Cruise sponsored by the MSMA and asked to go on record as saying that the

(Continued on page 121)

MSMA MEMBERS!

Watch for Your Special Hotel Reservation Card!

For the convenience of members who plan to reserve rooms at the Chase-Park Plaza Hotel, the MSMA will mail a special, postage-paid reservation card with room rates and other pertinent information.

You should receive your reservation card this month. Please forward it to the hotel as soon as possible for best accommodations.

MISSOURI STATE MEDICAL ASSOCIATION

115th ANNUAL SESSION

March 29-April 1, 1973 Chase-Park Plaza Hotel, St. Louis

medical melange

Notes of interest from Here . . . . and There

Dr. Roy W. Pearse, who has practiced medicine in Nevada (Mo.) since 1937, was named "1972 Man of the Year" by the Nevada Rotary Club at a luncheon on January 4. Rotarian **Bill King**, head of the Man of the Year Selection Committee, stated that the Committee felt that Doctor Pearse is symbolic of the primary criteria of the award—"service above self." Doctor Pearse has become involved in almost every facet of Nevada's growth, with particular emphasis on the medical field. Three testimonials at the luncheon lauded his efforts in the community, highlighting his work on the Nevada Industrial Development Corporation and the Nevada R-5 School Board and as a physician. Doctor Pearse has served as Vice-President of the Missouri State Medical Association.

Dr. Wilfred E. Wooldridge of Springfield, Clinical Professor of Dermatology at the University of Missouri School of Medicine, has been invited to return for a second appearance on the Guest Lecture Series of New York University, Oncology Section. On April 12, he will speak on the subject, "An Evaluation of the Cryosurgical Treatment of Skin Cancer."

Dr. Donald H. Giesler, Osceola, was among 12 University of Missouri faculty members and 11 alumni to receive certificates for "distinguished" service to the University at the fifth annual Faculty-Alumni Awards Dinner in Columbia in 1972. Other alumni award recipients included James Shen, the Republic of China's ambassador to the U. S.; Mrs. Virginia Young, internationally-known lecturer; Norm Stewart, head basketball coach; and Missouri Secretary of State James Kirkpatrick. Don Faurot, who retired after 37 years at the University as both a football coach and athletic director, also was honored.

Dr. Wallace McDonald, a specialist in internal medicine and cardiology, is the fifth generation of doctors to practice in St. Joseph. His great-great-grandfather, **Dr. Silas McDonald**, graduated from Cincinnati Medical College in 1837 and was Buchanan County's first physician. He settled near Wallace in 1838, five years before the organization of the town of St. Joseph. His great-grandfather was **Dr. Daniel McDonald**, who graduated from Long Island College Hospital in 1865. His grandfather, **Dr. Lee McDonald**, graduated from the University of Pennsylvania Dental School in 1897. His father, **Dr. Wilbur McDonald**, graduated from the University of Pennsylvania School of Medicine in 1937 and has practiced in St. Joseph since 1938. Dr. Wallace McDonald received his M.D. degree at the University of Pennsylvania in 1966.

A picture in the Jan. 12, 1973 issue of the *St. Louis Globe-Democrat* showed **Dr. Richard A. Sutter** of St. Louis with his trophy, a stuffed Alaskan sheep bagged in an air hunting expedition 300 miles north of Fairbanks. The sheep will be permanently displayed in the animal museum beneath the Arch in St. Louis.

Dr. William H. Ames, St. Joseph, has been elected to membership as a fellow of the Council on Clinical Cardiology of the American Heart Association. The Council acts as an advisory body for the AHA in directing its scientific and educational programs. Dr. Ames is immediate past-president of the Missouri Heart Association and a former president of the St. Joseph heart division of the Association. He continues to serve as a director and executive committee member of both organizations.

Scandinavian Tour Scheduled for MSMA Members

This is Old Town, Stockholm's medieval wonderland of tiny courtyards and quaint antique shops. Visitors stroll its cobblestone streets and explore Stockholm's setting of islands as they discover the serene beauty of Sweden.

Leningrad, Russia's planned city of magnificent onion-domed cathedrals and great pastel-colored palaces, is one of several private excursions available exclusively for members of the MSMA Scandinavian Adventure.

A special 14-day Scandinavian Adventure tour to Stockholm, Helsinki and Copenhagen will be sponsored by the Missouri State Medical Association for its members and their wives. Departure date will be July 18, 1973.

This is the second tour to be sponsored by the MSMA and it will feature medical seminars for the physicians and visits to important medical facilities in the foreign countries visited.

The special Scandinavian Adventure price of $868 will include chartered round-trip jet transportation via World Airways, deluxe hotels, two meals daily (American breakfast in your hotel and gourmet dinners at a choice of the finest restaurants in each city), tips, transfers and other extras. The baggage allowance has been increased to 70 pounds, which is more than an adequate allowance for shopping abroad and golf clubs.

For four days in Stockholm, tour members will stay at the luxurious Sheraton-Stockholm Hotel located in the center of town. Points of special interest will include the magnificent Millesgarden sculptures, the stateliness of Drottningholm Palace and its charming Court Theatre, the famous Old Town and numerous Swedish shops featuring items from Orrefors glass and crystal, pottery and pewter to textiles, furs and jewels.

There is no regimentation on the tour. Members can plan their own sightseeing. From Stockholm, they may take a short flight to the Isle of Gotland to see the ancient walled city of Visby or visit the Uppsala-Sigtura Lake Country of exquisite churches and old, picturesque towns. Also, there will be the opportunity to take an optional side trip to Oslo, Norway's capital, and see the Viking Ship Museum, Olympic Ski Jump and Norse Outdoor Folk Museum.

The next stop will be in Helsinki, capital of Finland, called the white city of the North (four days). Guests will stay at the beautiful Hesperia Hotel. An optional overnight excursion to Leningrad will be available at a special tour price. Known as Russia's "Western window on the world," this planned city of great pastel-colored palaces and magnificent onion-domed cathedrals was built by the Czars.

Then, there will be four days in Copenhagen, the fun-loving Danes' cosmopolitan capital and Denmark's largest city. Guests can visit the illuminated dancing fountains of the famed Tivoli Gardens, the moated Renaissance castles and Vikingland, the oldest kingdom in Europe.

A special Scandinavian Adventure escort of five hosts will travel with the tour members and assist in arranging sightseeing, shopping, golfing, nightclubbing and other activities.

Send Reservations Now

All MSMA members are invited to join the tour and are urged to make reservations as soon as possible by forwarding the reservation coupon which appears on page 135 of this issue of Missouri Medicine. A full color brochure and other pertinent information will be forwarded by the MSMA upon receipt of the reservation.

dvertisement

> *"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."*
>
> *– George Sarton, from "The History of Medicine Versus the History of Art"*

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion

Results of a questionnaire to 7,000 physicians:

62.9%
Believe combination drug products are useful.

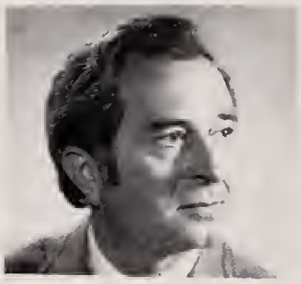
13.8%
Do not believe combination drug products are useful.

Are combination drug product useful in treatment involvin concomitant use of two or more drugs

Opinion & Dialogue

Doctor of Medicine

Louis Lasagna, M.D.
Professor and Chairman
Department of
Pharmacology & Toxicology
University of Rochester
School of Medicine
and Dentistry



Obviously, many drugs are given concomitantly. Whether it makes sense to combine medications in one preparation, be it capsule, tablet, or liquid, is a question that can be answered only by examining the advantages and disadvantages in the individual case.

Among the advantages is, first of all, convenience. The more medications that are taken concurrently and the more complicated the directions, the less likely the patient is to take medications accurately. From the standpoint of convenience and accuracy, and economy as well, you can make an important case for putting medications together in one preparation, as long as they are compatible.

By the same token, when you prescribe a properly tested and rational combination, you should have less worry about pharmaceutical or pharmacological compatibility — and about reasonable dosage ratios as well. Compatibility of the formulation should be demonstrated in the laboratory and clinic before the product is available for prescription—which is more than can usually be said for the physician's own spontaneous creations. And, the dosage ratios employed in rational precompounded combinations are designed to meet the needs of substantial numbers of "typical" patients.

There is no doubt that many "atypical" patients are to be found, and for them the prefabricated combination must be rejected. But that hardly argues for eliminating rational combinations from the market. Think, for example, of the problems that would arise if the components of widely accepted combinations, like the oral contraceptives and the diuretic-antihypertensives, always had to be prescribed, purchased and ingested separately.

One disadvantage that comes to mind is some doctors' unawareness of the ingredients a given combination contains. For example, a doctor might know that a patient is allergic to aspirin but forget that a certain analgesic mixture, which he knows only by its trade name, contains aspirin. His prescription, then, causes considerable discomfort, to say the least. This problem is a function of physician education, rather than of combination therapy as such. Improving doctors' knowledge about all medicaments they prescribe is a problem that deserves tackling on its own.

Another accusation leveled at combination drugs is that they encourage sloppiness of diagnosis and treatment. In many cases, however, a combination may prove to be the most effective choice. A good example of the usefulness of combinations appears in a recent article in the *Journal of Chronic Diseases* on the efficacy and side effects of an antihypertensive containing three ingredients, in which the track records of the combination drug and the individual ingredients were compared. Interestingly enough, whether the drugs were given individually or together, incidence and severity of side effects were the same. But blood pressure control was invariably better when the drugs were taken in one combination tablet than when they were taken separately (in "titratable" dosage) or in two or three different tablets.

Deciding which combinations constitute rational therapy obviously leads to a discussion of who is to determine which should be used and which should not. Realistically, I think combinations should be evaluated somewhat differently if they are old and established or new and untried.

In today's regulatory atmosphere, there is no possibility of a new combination being put on the market without a substantial amount of acceptable evidence in the form of controlled trials that show it to be safe and efficacious. On the other hand, I believe a different set of standards should apply to combination preparations that have been around for a long time. In other words, physician acceptance over a long period should be given some weight as evidence of the efficacy and safety of these drugs.

The FDA, however, does not seem to share this attitude. It often requires, for these older products, controlled trials that will monopolize the time of already overtired investigators and cost a great d
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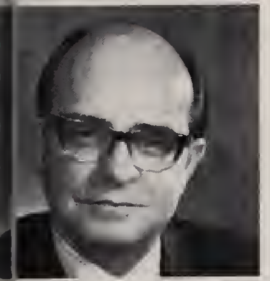
laker of Medicine

. Clarke Wescoe, M.D.
President
inthrop Laboratories



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icism generated against combinations generally. Obviously, no one should be exposed willy-nilly to the potential side effects of two or three antibiotics when only one is needed. At the same time there are cases where it is prudent to prescribe more than one. The clinician is the judge in these circumstances, as he should be.

There is no clear definition of the word rational. Most persons, I suppose, would find it synonymous with reasonable, but in many circumstances it may best he defined as the opinion of those in power at the moment.

Other factors govern combination therapy, not the least of which has been its broad use by practicing physicians anxious to achieve convenience in prescribing, to reduce medication error, and to save money for their patients. Combinations clearly have met the test on all three counts.

I have been impressed by studies showing that the rate of error climbs markedly with the number of medications to be taken, even with sophisticated patients. When medically justified, therefore, this factor alone supports the logic of combination therapy.

The cost argument for combinations appears to be irrefutable. In 1971, R. A. Gosselin studied the 71 combination products (excluding oral contraceptives) among the 200 most prescribed drugs. The study found that if all 71 products were discontinued, and if each ingredient in these combinations were prescribed separately, the price of medicines to patients would jump by $443.2 million on a national basis! At a time when the cost of medical care is under so much fire, it would be nonsensical to boost costs without clearly irrefutable medical reasons.

The part played by government on this question, of course, is fundamental. The FDA should play a role in determining which combinations are reasonable. That role, as defined by law and regulation, is to ensure that any medication on the market is safe and effective in line with its label claims. Certainly combinations are entitled to as much consideration as single entities—neither more nor less. So long as the addition of one drug to another does not make either less safe, or less effective, so long as they are compatible in a formulation, we have a reasonable product. It makes no sense to recommend the use of two products for certain conditions and to deny their being combined in a single form. An unhappy side effect of the problem concerns the efficacy panel discussions of many products submitted for review. The term "effective, but" has been freely interpreted to mean "ineffective" in toto, regardless of the merit of the individual drugs. This interpretation has placed numerous useful combination products in needless jeopardy.

In reading the actual reports of the review panels, it seems clear that some of the ratings were based less on scientific research and clinical observation than on the "informed" opinions of the panelists. These "informed" opinions were accepted at face value, while the "informed" opinions of others who had used the products were rejected. All of this put combination products into a sort of scientific never-never land.

It should be kept in mind by all, government as well as others involved in our health care system, that advances in therapy are seldom made in leaps and bounds but rather by small painstaking steps—and that some of these steps have resulted from research in combination drugs as well as with single entities. Given the near-infinite biologic variation in patient response, this is hardly surprising to clinicians. It should not be to regulatory agencies either.

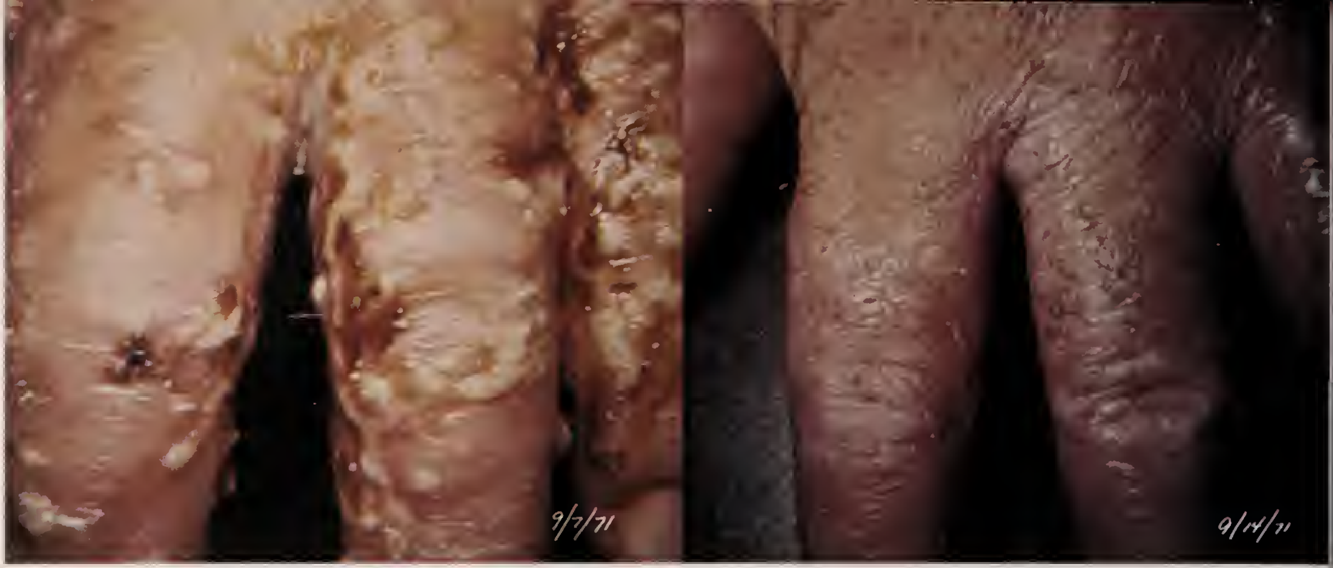
In the end, the practicing physician is in the best position to decide if a particular combination makes sense. Such a decision should not be made exclusively by those whose responsibility for continuing clinical care is limited. Clinicians are the best judges of efficacy because the ultimate proof of any product's effectiveness is acceptance by physicians who have observed its actions in patients over time. The corollary statement may be made about over-the-counter medicines, which would not long survive if they failed to afford the relief the user anticipates. That the antihistamine in a "cold" remedy may not *always* be necessary is no reason to proscribe the combination generally.

Opinion & Dialogue

What is your opinion, doctor?
We would welcome your comments.

P·M·A

The Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005



MINOCIN® made the difference in just eight days.*

Clinical Data:
Patient: 47-year-old male.
Diagnosis: Severe pyoderma, left hand.
Culture: *Staphylococcus aureus, coagulase* positive and sensitive to MINOCIN.
Temperature: 102° F
Therapy: MINOCIN Minocycline HCl Capsules, 100 mg: 200 mg *stat*, 100 mg every 12 hours. Medication began 9/7/71. By fourth day, temperature was normal and pustular lesions considerably improved. Last dose taken 9/14/71.
Concomitant therapy: None.†

Semisynthetic
MINOCIN®
MINOCYCLINE HCl
Capsules, 100 mg: 2 *stat*, 1 q 12 h.

Indications: For the treatment of susceptible infections; e.g., *E. coli, D. pneumoniae*. For full list of approved indications consult labeling.
Contraindications: Hypersensitivity to any tetracycline.
Warnings: The use of tetracyclines during tooth development (last half of pregnancy, infancy and childhood to the age of 8 years) may cause permanent discoloration of the teeth (yellow-gray-brown). This is more common during long-term use but has been observed following repeated short-term courses. Enamel hypoplasia has also been reported. Tetracyclines, therefore, should not be used in this age group unless other drugs are not likely to be effective or are contraindicated. In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, use lower total doses, and, in prolonged therapy, determine serum levels. Photosensitivity manifested by an exaggerated sunburn reaction has also been observed in some individuals taking tetracyclines. Advise patients apt to be exposed to direct sunlight or ultraviolet light that such reaction can occur, and discontinue treatment at first evidence of skin erythema. Studies to date indicate that photosensitivity does not occur with MINOCIN Minocycline HCl. In patients with significantly impaired renal function, the antianabolic action of tetracycline may cause an increase in BUN, leading to azotemia, hyperphosphatemia, and acidosis. CNS side effects (lightheadedness, dizziness, vertigo) have been reported, may disappear during therapy, and always disappear rapidly when drug is discontinued. Caution patients who experience these symptoms about driving vehicles or using hazardous machinery while taking this drug. *Pregnancy:* In animal studies, tetracyclines cross the placenta, are found in fetal tissues, and can have toxic effects on the developing fetus (often related to retardation of skeletal development). Embryotoxicity has been noted in animals treated early in pregnancy. Safety of use during human pregnancy has not been established. *Newborns, infants and children:* All tetracyclines form a stable calcium complex in any bone-forming tissue. Prematures, given oral doses of 25 mg./kg. every 6 hours, demonstrated a decrease in fibula growth rate, reversible when drug was discontinued. Tetracyclines are present in the milk of lactating women who are taking a drug of this class.

Precautions: Use may result in overgrowth of nonsusceptible organisms, including fungi. If superinfection occurs, institute appropriate therapy. In venereal diseases when coexistent syphilis is suspected, darkfield examination should be done before treatment is started and blood serology repeated monthly for at least four months. Because tetracyclines have been shown to depress plasma prothrombin activity, patients on anticoagulant therapy may require downward adjustment of such dosage. Test for organ system dysfunction (*e.g.*, renal, hepatic and hemopoietic) in long-term use. Treat all Group A beta hemolytic streptococcal infections for at least 10 days. Avoid giving tetracycline in conjunction with penicillin.

Adverse Reaction: GI: (with both oral and parenteral use): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in anogenital region. *Skin:* maculopapular and erythematous rashes. Exfoliative dermatitis (uncommon). Photosensitivity is discussed above ("Warnings"). *Renal toxicity:* rise in BUN, dose-related (see "Warnings"). *Hypersensitivity reactions:* urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus. In young infants, bulging fontanels have been reported following full therapeutic dosage, disappearing rapidly when drug was discontinued. *Blood:* hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia. *CNS:* (see "Warnings.") When given in high doses, tetracyclines may produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.

NOTE: Concomitant therapy: Antacids containing aluminum, calcium, or magnesium impair absorption; do not give to patients taking oral minocycline. Studies to date indicate that absorption of MINOCIN is not notably influenced by foods and dairy products.

***Indicated in infections due to susceptible organisms. Culture and sensitivity testing recommended. Tetracylines are not the drugs of choice in the treatment of any staphylococcal infection.**

†Case Report, Clinical Investigation Department, Lederle Laboratories.

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York 10965 12-20 436-2

"For generations my family has insisted on Donnagel®-PG," says active young matron Mrs. T. Farnsworth Lipp (of the Upper Lipps), shown here with her charming son. "All the benefits of paregoric—without the unpleasant taste, don't you know? And Junior thinks Donnagel-PG tastes so much like bananas that I never worry about a slip between spoon and Lipp."

A Matter of Taste

With or without a silver spoon, a most tasteful solution in treating acute, non-specific rrheas: all the benefits of paregoric, without the unpleasant taste. Donnagel®-PG treats ompanying cramping, tenesmus, and nausea as well as the diarrhea itself. Instead of leasant-tasting paregoric, it contains the therapeutic equivalent, powdered opium, promote the production of formed stools and lessen the urge. And it provides the nulcent-detoxicant effects of kaolin and pectin, plus the antispasmodic benefits of ladonna alkaloids. And a good banana flavor to baby any taste.

Donnagel-PG
6 FL.OZ.
A·H·ROBINS

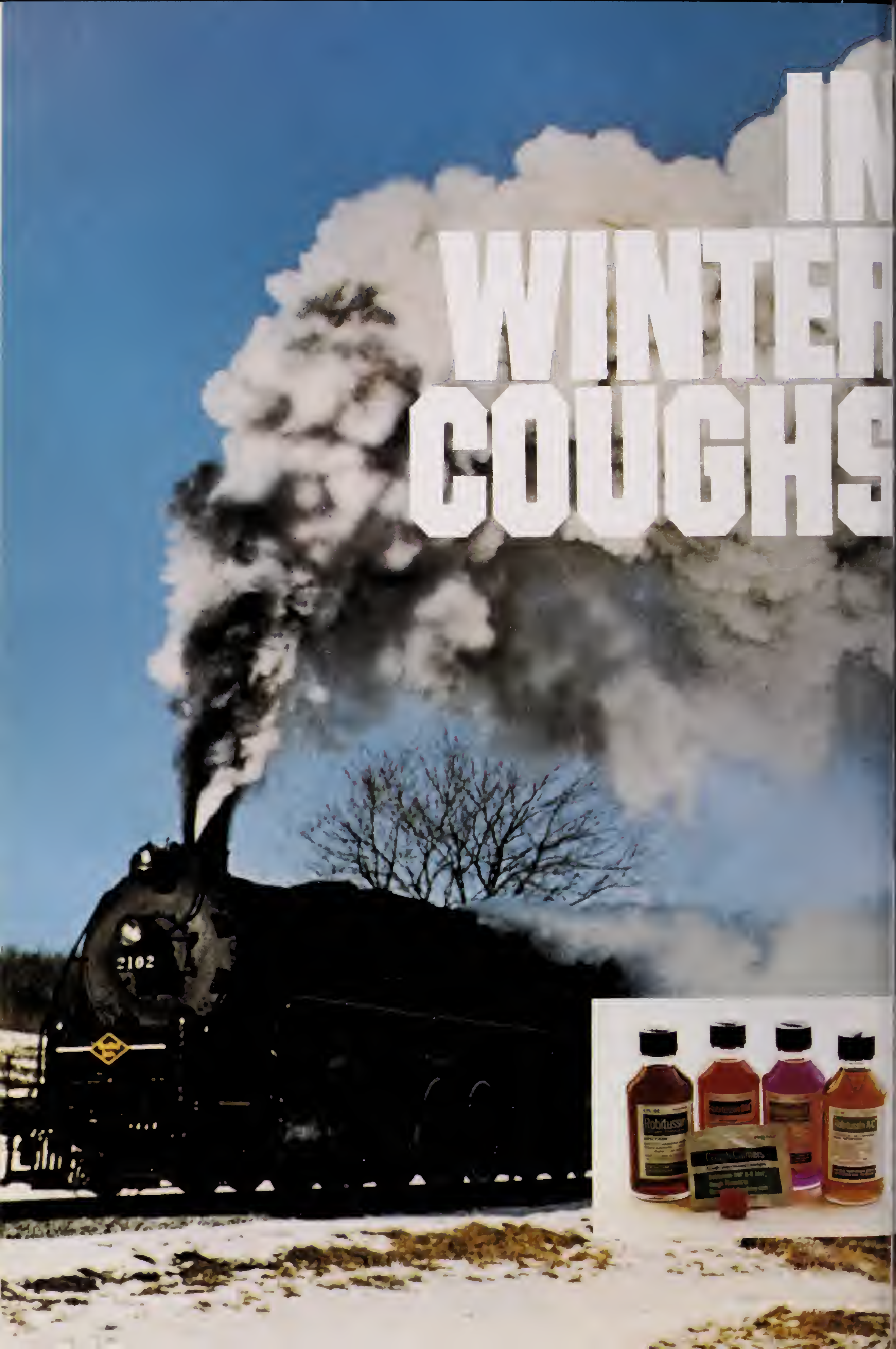
Donnagel®-PG

Donnagel with paregoric equivalent

Ⓥ Available on oral prescription or without prescription under limited circumstances as modified by applicable state law.

Each 30 cc. contains: Kaolin, 6.0 g.; Pectin, 142.8 mg.; Hyoscyamine sulfate, 0.1037 mg.; opine sulfate, 0.0194 mg.; Hyoscine hydrobromide, 0.0065 mg.; Powdered opium, USP, 24.0 mg. uivalent to paregoric 6 ml.) (Warning: may be habit forming); Sodium benzoate (preservative), mg.; Alcohol, 5%. A.H. Robins Company, Richmond, Virginia 23220

A·H·ROBINS


IN
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CoughCalmers

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INE

The coughing season is here again. Time to rely on the four Robitussins and Cough Calmers to help clear the lower respiratory tract. All contain glyceryl guaiacolate, the efficient expectorant that works systemically to help increase the output of lower respiratory tract fluid. The enhanced flow of less viscid secretions soothes the tracheobronchial mucosa, promotes ciliary action, and makes thick, inspissated mucus less viscid and easier to raise. Available on your prescription or recommendation.

For coughs of colds and "flu"

ROBITUSSIN®

Each 5 cc. contains:

Glyceryl guaiacolate	100 mg.
Alcohol, 3.5%	

For unproductive allergic coughs

ROBITUSSIN A-C® Ⓒ

Each 5 cc. contains:

Glyceryl guaiacolate	100 mg.
Pheniramine maleate	7.5 mg.
Codeine phosphate	10.0 mg.
(warning: may be habit forming)	
Alcohol, 3.5%	

Non-narcotic for 6-8 hr. cough control

ROBITUSSIN-DM®

Each 5 cc. contains:

Glyceryl guaiacolate	100 mg.
Dextromethorphan hydrobromide	15 mg.
Alcohol, 1.4%	

Robitussin-DM in solid form for "coughs on the go"

COUGH CALMERS®

Each Cough Calmer contains:

Glyceryl guaiacolate	50 mg.
Dextromethorphan hydrobromide	7.5 mg.

Relieves cough, clears sinuses and nasal passages—keeps them "drip-dry" but not bone dry

ROBITUSSIN-PE®

Each 5 cc. contains:

Glyceryl guaiacolate	100 mg.
Phenylephrine hydrochloride	10 mg.
Alcohol, 1.4%	

the Robitussin®
Tract" Formulation
reats Your Patient's
ual Coughing

	Expectorant-Demulcent	Cough Suppressant	Antihistamine	Long-Acting (6-8 hours)	Nasal, Sinus Decongestant	Non-Narcotic
JSSIN®	●					●
JSSIN A-C®	●	●	●			
JSSIN-DM®	●	●		●		●
JSSIN-PE®	●				●	●
CALMERS®	■	■		■		■

andy chart as a guide in selecting the formula that provides the benefits you want for your patient.

A-H-ROBINS

A. H. Robins Company, Richmond, Virginia 23220

Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole. **Warnings:** If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established. **Precautions:** Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored. **Adverse Reactions:** Most frequently encountered are anorexi nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddines and headache have occurred. Rarely, tinnitus, hyperirritabilit numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis an parenchymal liver damage; hyperglycemia; transient leukope malodor of the urine, crystalluria, hematuria; appearance of l Ascaris in the mouth and nose. Hypersensitivity reactions

New
osage Form:

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ablets 500 mg
intezol®
IABENDAZOLE | MSD)

easy to take
eryone in the family
n keep to the
gimen you prescribe

le: fever, facial flush, chills, conjunctival injection, edema, anaphylaxis, skin rashes, erythema multiforme ding Stevens-Johnson syndrome), and lymphadenopathy.
ied: Chewable tablets, containing 500 mg thiabendazole, es of 36, strip packaged, individually foil wrapped; nsion, containing 500 mg thiabendazole per 5 cc, in s of 120 cc.

ore detailed information, consult your MSD representa- r see full prescribing information. Merck Sharp & e, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD
MERCK
SHARP&
DOHME

addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

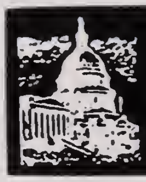
Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.



WASHINGTON

New faces will be leading the nation's major governmental health programs in President Nixon's second term in office.

At the helm of the Department of Health, Education and Welfare will be a new kind of secretary, a man with a reputation as a budget slasher with a zeal for protecting the taxpayers' dollar.

Caspar Weinberger will be the first HEW secretary schooled in the money world of fiscal prudence. Nicknamed "Cap the Knife," the appointment of Weinberger to run the government's social welfare, health and educational programs perhaps marks the President's most daring cabinet decision.

Selection of the 55-year-old California lawyer seems to be proof of the President's intention to reverse the tide of heavier federal welfare spending, to channel more money and responsibilities to states and localities and to steer away from the European welfare state concept.

Weinberger will be moving over to HEW from the post of director of the White House Office of Budget and Management, a cabinet post but one in which Weinberger was able to function in the comparative anonymity he has preferred to date. At HEW, he will be thrust into the limelight and in short time will become one of the best-known public figures in the nation.

Despite its reputation as a wrecker of reputations, the HEW Department secretaryship has served most of its occupants well. Outgoing Secretary Elliot Richardson was elevated to the more powerful and prestigious post of defense secretary. Abraham Ribicoff, who despaired of presiding over the "can of worms" at HEW, found his tenure there no handicap in his race for the Senate.

Ribicoff will be one of the senators present at the Senate Finance Committee confirmation hearing in January on Weinberger's nomination. The confrontation between Ribicoff and Weinberger promises to be an interesting exchange as Weinberger outlines his views on his new position and Ribicoff contributes his advice.

Few fireworks are expected at the confirmation hearing. No committee on Capitol Hill is more conscious of the waste and duplication at HEW than Senate Finance which has a membership considerably more conservative than the Senate as a whole.

Weinberger undoubtedly will give a good picture of his general views and philosophies during his appearance. If he follows tradition, a more detailed explication will be made at a news conference after he is confirmed and sworn in as HEW Secretary.

Weinberger is no stranger to the operations of HEW. At the Budget Office, he became well acquainted with the finances of HEW and, indeed, in tandem with the White House, exerted extraordinary fiscal powers over federal health programs.

Weinberger's appointment may end a chafing dichotomy between the White House staff and the White House OMB on the one hand and HEW on the other. As a loyal Administration servant, Richardson was willing to put up with the situation while it lasted, but it is doubtful he would have remained compliant much longer.

There's little question that Weinberger is going to propose HEW cuts that will enrage some congressmen. On the whole, however, the expectation here is that he won't be easily categorized except perhaps as a pragmatist.

He has noted for example, that more than 71% of federal expenditures are for things over which the Administration has no control—such items as interest on the national debt, Medicare and veterans compensation.

* * *

John G. Veneman, the number two man at HEW, also has announced his resignation, presumably with an eye to running for lieutenant governor of California.

Veneman was a frequent spokesman for HEW before the Congress before he became undersecretary of Health, Education and Welfare in 1969 at the request of then-HEW Secretary Robert H. Finch.

Frank C. Carlucci, the former director of the

Office of Economic Opportunity who now is deputy budget director, is in line to replace Veneman. Carlucci was number two man in the Office of Management and Budget to Caspar Weinberger.

Carlucci's place in the Office of Management and Budget will be taken by Fred Malek, the Nixon Administration troubleshooter who now heads recruiting efforts in the reshuffle taking place before the President's second term.

* * *

Also departing from the command line-up at HEW are Assistant Secretary for Health and Scientific Affairs, Merlin DuVal, M.D., and Vernon Wilson, M.D., chief of Health Services and Mental Health Administration, the largest operating branch of HEW.

Doctor DuVal, whose resignation comes 16 months after his appointment, returns to the University of Arizona where he will be vice-president for medical affairs. Doctor Wilson returns to the University of Missouri Medical School after guiding HSMHA since May, 1970.

Doctor DuVal believes that the administration of health programs has been tightened and control over the various health agencies strengthened during his tenure. He gives HEW Secretary Elliot Richardson credit for moving in this direction, though he helped institute much of the change. DuVal also significantly broadened HEW's health liaison with other federal departments.

Doctor Wilson carried out a sweeping reorganization of HSMHA, focusing management in his office and among his deputies. He was given high marks for bringing order out of an amorphous spread of agencies.

In neither case were the resignations of DuVal and Wilson the result of any pressure from above. The Administration wanted both physicians to stay on. The departures of DuVal and Wilson give new HEW Secretary Caspar Weinberger two important health slots to fill.

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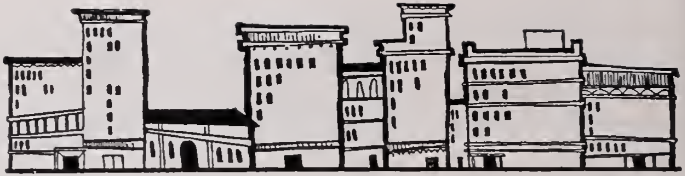


WASHINGTON UNIVERSITY

David M. Kipnis, M.D., has been named Washington University School of Medicine's Busch Professor and head of the Department of Medicine.

Dr. Kipnis

Doctor Kipnis, who has been a professor of medicine since 1965, succeeds the late *Carl V. Moore,* M.D., who died on Aug. 13, 1972. Doctor Moore had held the position since 1955.

Doctor Kipnis joined the Washington University medical faculty in 1955 to work with Nobel laureate *Carl F. Cori,* M.D., then professor and head of the Department of Biological Chemistry. He has served as director of Washington University's Clinical Research Center since 1960, and in August, 1972, was named director of the new Lipids Research Center.

Recognized as an authority on endocrinology and diabetes, Doctor Kipnis won the American Diabetes Association's Lilly Award and the Endocrine Society's Ernst Oppenheimer Award in 1967. He was the first to win the two prizes in the same year. The Lilly Award recognized his contribution to the understanding of intracellular transport and metabolism of glucose, insulin and growth hormone. The Oppenheimer Award honored his "meritorious achievement in clinical endocrinology."

Doctor Kipnis received his M.D. degree, summa cum laude, from the University of Maryland School of Medicine in 1951. He trained at Johns Hopkins University, Duke University and University of Maryland hospitals before going to Washington University on an American College of Physicians Research Scholarship. He was appointed a John and Mary Markle Scholar in Medical Science from 1956 to 1961.

E. James Anthony, M.D., Blanche F. Ittleson Professor and head of the William Greenleaf Eliot Division of Child Psychiatry at the School of Medicine, was one of five medical researchers who recently participated in a series of news media sessions sponsored by the National Institute of Mental Health (NIMH), in Washington, D. C.

Doctor Anthony discussed results from NIMH-supported studies of children of psychotic parents conducted at the Medical School's child development research center. The seven-year study has involved 642 children up to age 17 in 220 families where one or both of the parents is subject to either schizophrenia or manic-depressive psychosis.

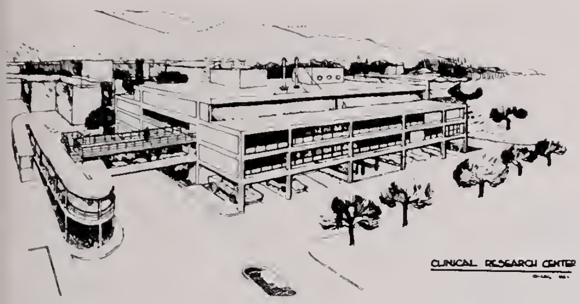
Dr. Arpad Csapo, professor of obstetrics and gynecology, has been awarded the International Health Foundation Award for 1972. He was notified by Dr. P. A. van Keep, director-general of the Geneva-based International Health Foundation, that his article, "The Prospects of Prostaglandins in Postconceptional Therapy," had won the prize which carries with it a cash award of 5,000 Swiss francs. Doctor Csapo is an internationally-recognized authority on hormonal control of the human uterus. Before his appointment at Washington University in 1963, he was head of the Laboratory of Physiology of Reproduction at Rockefeller University in New York.

ST. LOUIS UNIVERSITY

Dedication ceremonies marking the completion of the $4.5 million Anemia and Malnutrition Research Center of Chiang Mai and St. Louis Universities in Chiang Mai, Thailand highlighted an international symposium on protein-calorie malnutrition held there on January 8-11, according to *Dr. Robert H. Felix,* dean, St. Louis University School of Medicine. His Majesty, *The King of Thailand,* presided.

Dr. Robert E. Olson, Doisy professor and chairman of the Department of Biochemistry at the St. Louis University School of Medicine, is director of the Center and was present for the dedication. He was among the prominent speakers who delivered papers at the meeting.

Before departing for Thailand, Doctor Olson said, "It is probably true that this is the most important medical meeting to be held in Thailand in its entire history. There will be more distinguished scientists gathered to attend the meeting than have previously assembled anywhere in that country for medical discussion, and we think this is something of a landmark



Architect's concept of the Anemia and Malnutrition Research Center of Chiang Mai University and St. Louis University.

for Chiang Mai as well as for St. Louis University."

The new four-floor, air-conditioned Center contains service research facilities, major laboratories, patient-bed areas, animal quarters, administrative offices and a library-conference room. The laboratories are equipped with all the necessary instruments to carry out modern research including rooms for electron microscopes and specialized equipment.

The Center is aided by grants from the National Institutes of Health, the Rockefeller Foundation and the Government of Thailand.

Proceedings of the three-day symposium will be published and will be made available to the scientific community as a status report on protein/calorie malnutrition in Thailand.

Dr. Thomas F. Frawley, professor and chairman, Department of Internal Medicine, was selected by the American College of Physicians to serve with a team of United States Professors of Medicine on the faculty of medicine of the Universidad Central de Venezuela, Caracas, Venezuela and the Venezuelan Society of Internal Medicine on January 22-26. Other members of the team were selected from the University of Pennsylvania School of Medicine, the Dartmouth Medical School and the Bowman Gray School of Medicine. The professors gave lectures and demonstrations at the School of Medicine and provided consultative assistance with respect to modernizing the school's medical education methods so that it will be able to meet the growing need for physicians in Venezuela.

Dr. D. Elliott O'Reilly was named president-elect of the American Academy for Cerebral Palsy at the annual meeting in Washington. He was treasurer of the group from 1966 until present and has held offices as chairman of four committees in the Academy from 1962 to 1966.

Dr. William E. Allen, associate clinical professor of radiology, was elected to active membership in the American Society of Therapeutic Radiologists at its recent meeting in Phoenix, Ariz. Doctor Allen is radiotherapist for the St. Louis University Medical Center.

The St. Louis University School of Medicine has a *new telephone number*. It is 664-9800, replacing 865-2288. All stations remain the same. This number also applies to the St. Louis University Medical Center Administration, School of Nursing and Allied Health Professions, Graduate Department of Orthodontics, Institute of Molecular Virology and the Public Relations and Development Departments. The telephone numbers for the St. Louis University Hospitals (Firmin Desloge and David P. Wohl Memorial Mental Health Institute), Cardinal Glennon Memorial Hospital for Children, the Doctor's Office Building and the Catholic Hospital Association remain the same.

UNIVERSITY OF MISSOURI-COLUMBIA

Dr. Eleanor Shaheen has been appointed professor and associate chairman of pediatrics at the University of Missouri-Columbia School of Medicine.

Doctor Shaheen, who has held similar positions at Hahnemann Medical College in Philadelphia, is particularly interested in child growth and development, with special emphasis on emotional problems. She also has been patient care coordinator for children at Hahnemann Medical College and Hospital, has had responsibility for teaching programs in the pediatric division and has been involved in the development of intensive ambulatory service programs and out-reach community programs.

Dr. Shaheen

She received her M.D. degree from the University of Pennsylvania in 1950. Her residency training was at Children's Hospital in Philadelphia where she later held a postdoctoral fellowship in psychological pediatrics.

She has served on the staff of the Graduate School of Public Health at the University of Pittsburgh; as director of medical education (pediatrics) for St. Michael's Hospital in Newark, N.J.; as senior public health physician for the New Jersey State Department of Health; and an association physician in the division of gastroenterology at Children's Hospital in Philadelphia. She joined the Hahnemann Medical College faculty in 1964 and was named a full professor and associate chairman of pediatrics in 1971.

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KENDRICK C. DAVIDSON, M.D., *Kansas City*

Unusual Renal Arteries in a Potential Kidney Donor

Case Report

Variations in the renal arteries are more commonly found in the presence of anomalous renal development. Some 30% of persons with normal kidneys have more than a single renal artery per side,[1] but the chance for multiple renal arteries is considerably greater in the presence of malrotations, fusions and ectopias, such as in horseshoe kidneys.[2] A recent case of anomalous renal arteries is described as encountered in a potential kidney donor.

Case Report

A healthy 48-year-old white man entered St. Luke's Hospital on Jan. 25, 1972 following preliminary out-patient investigation for the possibility of serving as a renal donor for his anephric, post-glomerulonephritic, middle-aged brother. Accumulated data included normal EKG, chest X-Ray, complete blood cell count, SMA-12 analysis, creative clearance (130 cc/min) and tissue typing showing an "A" match.

The patient underwent percutaneous transfemoral flush aortography without incident, which demonstrated multiple bilateral renal arteries. The left kidney (Figs. 1 & 2) was served by a left main renal artery which divided early, plus an accessory branch to the lower pole arising from a common aortic trunk vessel at the L_1 vertebral level. This same trunk artery, extending toward the left, gave off a right branch to the central portion of the right kidney, while passing in front of the aorta (Figs. 1 & 2). The upper pole of the right kidney received blood from the main right renal artery. Another accessory branch (Fig. 2) arising opposite the third lumbar vertebra fed the lower pole of the right kidney. Because of the common trunk artery off the aorta serving both kidneys and the multiple arteries to the potential donor kidney (the left one), the patient was turned down as a kidney transplant donor.

Reported Variations in Renal Artery Anatomy

Multiple renal arteries have been known since Eustachius first described a case in 1552.[3] Em-

Some 30% of people with normal kidneys have more than a single renal artery supplying each kidney. In this day of advancing use of renal transplantation, the surgeon must know the status of the renal arteries before attempting transplantation. Multiple renal arteries preclude transplantation because of small branches which are technically difficult to anastamose successfully. In this case report, a potential renal artery donor was rejected because of an unusual anomalous origin of the main renal arteries from a common aortic branch in the presence of apparently normal kidney architecture. Doctor Davidson is a Radiologist at St. Luke's Hospital of Kansas City.

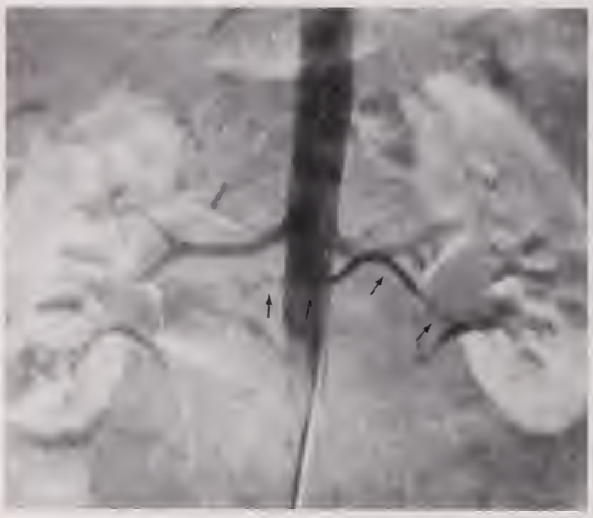

Fig. 1 Retrograde transfemoral aortogram, early injection phase (subtraction print). Aortic trunk vessel with accessory left lower polar and right central renal branches (*arrows*).

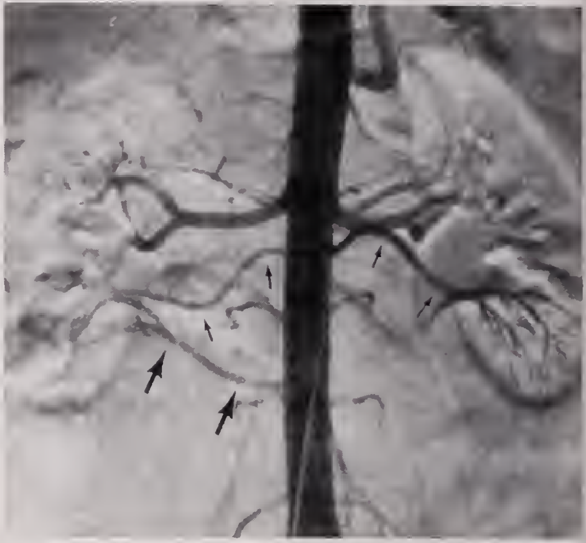

Fig. 2. Aortogram, later arterial phase (subtraction print). Aortic trunk vessel with accessory left lower polar and right central renal branches (*small arrows*). Accessory right lower polar branch arises from aorta (*large arrows*).

bryologically, the primitive urogenital structures are supplied by an extensive pattern of small aortic branches, the rete arteriosum urogenitale.[1, 4] Lack of tissue differentiation and relative development from the embryological state, as seen in the renal malrotations, fusions and ectopias, is often accompanied by persistance of variable numbers and patterns of these embryonic branches from the aorta or its main abdominal tributaries.[1, 4-6] Because of the relatively common presence of multiple or anomalous renal arteries, it becomes imperative when renal transplantation is considered that the potential donor kidney (usually the left because of adequate vessel length) be evaluated by arteriography. Accessory vessels, located at either pole of the kidney and supplying less than the major amount of renal parenchyma, constitute a reason for rejection of the kidney as a donor source.

Extra-aortic supernumerary renal artery branches are rare but have been reported arising from a number of different branches, including coeliac, right hepatic, inferior phrenic, right colic, inferior mesenteric, second and third lumbar, gonadal, common and external iliac, hypogastric and middle sacral arteries.[1, 5, 7, 8] Also, these supernumerary branches are usually seen with renal anomalies.

Bilateral accessory renal arteries from a common aortic or renal trunk artery are rarely reported with normal kidneys.[9-11] The current case seems even more unusual since, in the presence of apparently normal kidneys, an aortic trunk artery supplied a left lower polar branch and a right central branch, while the right lower pole was supplied by a third accessory branch from the aorta.

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Reprints: Kendrick C. Davidson, M.D.
St. Luke's Hospital
44th and Wornall Rd.
Kansas City, Mo. 64111

ARTHUR I. AUER, M.D. *and*
FALLS B. HERSHEY, M.D., *St. Louis*

Bypass Vein Grafts to Distal Tibial or Dorsalis Pedis Arteries

Case Reports

Amputations can be prevented and many patients rehabilitated by long bypass vein grafts anastomosed to arteries in the lower leg or foot. Although the long-term results are still in doubt, the early success is encouraging. The technique reported proposes the following:

1. Detailed arteriograms prior to any amputation. Late phase films frequently reveal distal vessels satisfactory for anastomosis.
2. All grafts originate on the common femoral artery, with rare exceptions.
3. The distal anastomosis is end-to-side to the peroneal, posterior tibial, anterior tibial or dorsalis pedis arteries at any level below the popliteal trifurcation. The magnifying loupe has been useful.

Indications and Preoperative Evaluation

All 24 patients had advanced ischemia of the foot manifested by pain at rest, gangrene of the toes or nonhealing ischemic ulcers (Table 1). Sepsis involving the heads of metatarsal bones was present in four cases. In this series, the operation was not performed for intermittent claudication, and we have not yet encountered cases of trauma or embolism in which it was necessary or feasible. The only contraindications have been recent myocardial infarction, renal failure or gangrene proximal to the foot.

These patients were advanced in years; all had arteriosclerosis elsewhere and two thirds of them had diabetes (Table 2). The patients ranged in age from 60 to 81 years, and the average age was 72. Arteriosclerotic heart disease was evident in all but three, and many required maintenance digitalis. Three had previous cerebral vascular accidents.

TABLE 1

INDICATIONS

Ischemic pain at rest	24
Gangrene of toes or ischemic ulcers	18
Plantar space sepsis	2
Failure of previous operation	
Nonhealing toe amputations	2
Previous femoro-popliteal bypass (3 mo) (24 hr)	3
Septic prosthesis thrombosed	1

TABLE 2

OTHER MANIFESTATIONS OF ATHEROSCLEROSIS

24 Cases	
Arteriosclerotic heart disease	21
Cerebrovascular accidents	3
Diabetes	15
Atherosclerosis of opposite leg	
Occlusions of femoral or popliteal artery	24
Amputations of opposite leg (AK)	2
Previous lumbar sympathectomy	2

Severe arteriosclerosis was present in both legs of all patients. Two had had previous major amputations, one above the knee and the other below. Two had had previous bilateral lumbar sympathectomies.

Arteriograms revealing the abdominal aorta and iliac arteries, as well as both femoral arteries and their outflow, were performed in all cases. Occlusions of the opposite femoral or popliteal arteries or both were found in all patients. Inflow via the aorta and iliac arteries was adequate in all but two patients who required a bypass prosthesis from the opposite femoral artery prior to the long vein graft.

Extensive arteriosclerosis was present in the operated leg with occlusions of both the femoral and popliteal arteries in almost all patients. All operations were elective except in two patients in whom femoral-popliteal bypass vein grafts had thrombosed acutely. Several patients needed preliminary procedures to drain infection. A septic prosthesis was removed prior to the long graft in one case.

Technique

Arteriography

Complete arteriography furnished a map of the distal abdominal aorta and its branches, as well as both thighs and legs, including detailed films of the involved leg, ankle and foot.

A 160 Seldinger needle is introduced into the common femoral artery on the involved side, and the first injection is 40 cc of 60% iothalamate meglumine (Conray) at a pressure of 225 lb per square inch or at a rate of 20 cc per second. This refluxes proximally into the terminal aorta and then down both iliacs and into the thighs. Films of the abdomen, thighs and legs are exposed at subsequent intervals. An automatic rapid film changer is helpful.

Details of the popliteal artery outflow and the lower leg and foot are revealed after slower injection by hand for 5 seconds using 30 cc of 60% Conray. The injected dye perfuses through the collateral vessels to fill the calf and foot in 20 to 30 seconds in most cases. A third injection of 20 cc of contrast medium occasionally is needed with the changer underneath the foot and distal leg. Films are obtained every 2 seconds for 16 seconds (eight pictures) starting 15 seconds after the dye injection is initiated.

It is important to obtain x-rays of the foot and ankle region in the lateral as well as the A-P projection. On several occasions, a good dorsalis pedis artery was seen in the lateral projection that was obscured in the A-P view by the overlying tarsal bones. The refilling of the distal leg arteries may be very slow when the proximal segments of these arteries are occluded. A total dose of 150 cc to 200 cc of Conray 60% has been well tolerated.

Venous bypass grafts to the distal tibial or peroneal arteries or their branches were performed for ischemic rest pain, gangrenous toes or ulcers in 24 patients during the past seven years. The average age of the patients was 72. The authors report that 15 of 24 patients are patent and walking and show that, by careful selection of patients, amputations can be prevented and many patients rehabilitated by this technique. The authors are from the Department of Surgery, St. John's Mercy Hospital.

Site of Distal Anastomosis

Table 3 shows the site of the distal anastomoses. Good arteriograms make it unnecessary to explore doubtful portions of the artery. In a few cases, calcification, fragility or "beading" not seen on the films made it necessary to extend the incision distally. Complete and thorough arteriograms are a good guide to the operative site, and there has been excellent correlation with the findings at operation.

TABLE 3

SITES OF DISTAL ANASTOMOSES

	Distal Anastomosis (Outflow)		
	ANTERIOR TIBIAL	POSTERIOR TIBIAL	PERONEAL
Upper *	7	2	3
Lower	x	6	1
Foot (Dorsalis pedis)	5	x	x

* Distal to the trifurcation

The anastomosis is made at the mid-portion of the most normal part of the longest open segment of the distal tibial, peroneal or dorsalis pedis arteries. It is encouraging when one or more main trunks extend onto the foot, but discontinuity at the ankle is not a contraindication. One satisfactory artery has been sufficient for anastomosis and salvage of the foot. Most vessels have been at least 2 mm, but smaller diameter of the outflow has not been a contraindication; in five cases, the only suitable artery was the dorsalis pedis artery on the foot. The posterior tibial artery is most accessible at the ankle, but we have not hesitated to insert the graft in its deeper portion in the mid-calf and suspect the outflow via numerous muscular branches may be better at this location than at the ankle.

The peroneal artery sometimes is the only open outflow and may extend onto the foot. The anterior tibial artery occluded in its upper portion may be slow to fill via collaterals through the skin or calf muscle.

Proximal Anastomosis

The proximal anastomosis in 18 of the 24 patients was performed at the common femoral artery. At the site of anatomosis, thrombo-endarterectomy corrected stenoses of the common

TABLE 4

SITES OF PROXIMAL ANASTOMOSES

	Proximal Anastomoses (Inflow)
Common femoral	18
Superficial femoral	5[*]
Popliteal	1

[*] Two of these in conjunction with a femoro-femoral bypass prosthesis. The vein graft was attached 3 cm distal to the prosthesis on the endarterectomized stump of the proximal superficial femoral artery.

TABLE 5

SUPPLEMENTARY PROCEDURES DURING 24 BYPASS VEIN GRAFTS

To improve inflow and profunda outflow		12
Femoro-femoral crossover prosthesis	2	
Patch angioplasty widen vein graft on common femoral or profunda artery	4	
Thromboendarterectomy common femoral, profunda or proximal superficial femoral	6	
To improve vein graft length or caliber		7
Procure from other leg	3	
Resect narrow segment and splice	3	
Onlay patch at the takeoff	1	
Incision and drainage or toe amputation for debridement		2

femoral artery, the profunda or proximal superficial femoral artery. Detection and correction of these stenoses assured adequate outflow through the profunda artery as well as insuring adequate inflow for the bypass. Patch angioplasty was performed in six patients (Table 4). These plaques on the posterior wall are not detectable in the usual antero-posterior arteriograms. Two patients had complete occlusion of the external iliac and common femoral arteries and were very poor operative risks. Inflow to the vein graft and profunda was brought across from the opposite common femoral artery by inserting a prosthesis subcutaneously across the pubis. These prostheses were inserted over the common femoral bifurcation and profunda, and the vein graft was attached to the short endarterectomized segment of superficial femoral artery (Table 4).

The superficial femoral artery is a suitable site for the proximal anastomosis in cases of popliteal aneurysm or trauma. A normal superficial femoral artery was suitable for the proximal anastomosis in six cases (Table 4). Because past experience has shown that atherosclerosis in the superficial femoral artery usually progresses upward and occludes its origin, the best inflow for the graft is usually the common femoral artery.

Procurement of Vein Graft

The length of vein graft should not dictate the sites of anastomosis because sufficient length of veins of adequate caliber can almost always be obtained. Sometimes, this required splicing segments from the opposite leg or the arm. Unsatisfactory vein grafts are an avoidable cause of failure. The long saphenous vein is removed from the ankle to the groin in all cases. When, as occasionally occurred, it is doubled, narrow or otherwise unsuitable in the mid-portion about the knee, this part is excised and discarded. If the dorsalis pedis artery is to be used for the distal anastomosis, the saphenous vein must be dissected out distally to the tarsal-metatarsal region (Table 5).

To begin the operation, both surgeons start a long continuous incision from the ankle and the groin. They trace the vein simultaneously from above and below. Do not undermine the skin edges. If the vein is doubled, excise the edge of undermined skin to prevent delayed healing or sloughing. After reversal and anastomosis, the vein is usually placed in its deep subcutaneous bed in the thigh, or, in a thin leg, make a tunnel deep to the santorius in the mid-thigh. The tunnel for the vein below the knee varies with the site of distal anastomosis, as described later.

Team Work

The operation is expedited when two surgeons operate simultaneously. Surgeons A and B procure the vein graft together. While one prepares the vein, the other exposes and opens the common femoral artery and performs a local endarterectomy when necessary. While Surgeon A performs the proximal anastomosis, Surgeon B prepares the distal artery. During the distal anastomosis, the proximal incisions are closed. The proximal anastomosis is made first so that when the clamps are released, the vein graft is distended and lengthened under pressure prior to its insertion distally.

Surgical Exposure of the Distal Posterior Tibial Artery

The posterior tibial artery is most accessible, so it is preferred when it is suitable. At the ankle, it is superficial. The posterior tibial artery in the calf is deeper and is surrounded by paired veins with cross connections and many

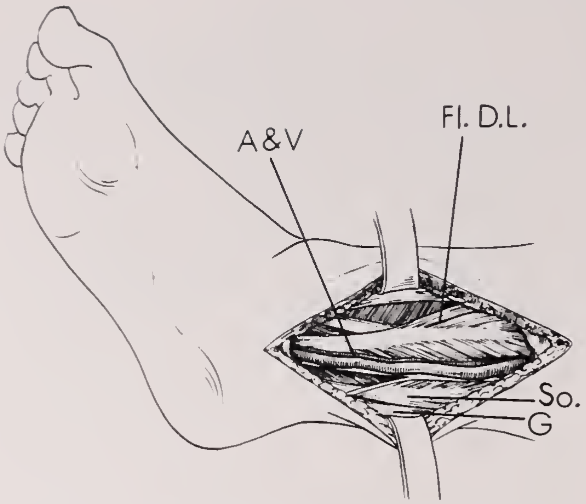


Fig. 1 Surgical anatomy of the posterior tibial artery. A. & V.: artery and veins. Fl.D.L.: flexor digitorum longus. So.: soleus muscle. G.: gastrocnemius muscle.

tributaries. Good arteriograms, however, avoid needless dissection. We suspect that the collateral circulation through the various muscle branches is more abundant than the subcutaneous collateral in the ankle and foot or close to the atherosclerotic trifurcations. Fig. 1 illustrates the surgical anatomy in the lower leg.

Surgical Exposure of the Peroneal Artery

The peroneal artery was the most suitable for only outflow in four patients. We approach it medially and there is no need to resect the fibula (Fig. 2). A lateral tarsal pulse may appear postoperatively as an extension of the peroneal artery into the foot. The tunnel is constructed on the medial aspect of the leg, also. We frequently divide the tendons attached to the upper medial aspect of the tibia in order to make a short direct pathway without constriction or angulation, so that the graft can be visualized in its bed prior to closure.

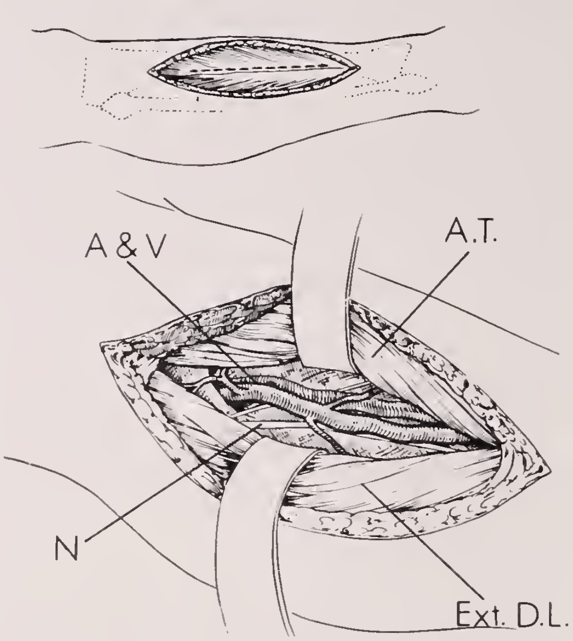


Fig. 2 Surgical anatomy of the anterior tibial artery. Dotted line is the incision through the fascia. Fibers of the anterior tibial muscles are then reflected from their origin on the intermuscular septum. A. & N.: artery and nerve (the veins are omitted). A.T.M.: anterior tibial muscles. Ext.D.L.: extensor digitorum longus muscle.

Surgical Exposure of the Anterior Tibial Artery

In seven patients, the mid-portion of the anterior tibial artery was approached through an incision in the antero-lateral aspect of the leg, separating the muscles as diagrammed in Fig. 3. Divide the cross connections between the paired veins and free up the veins from the artery for the anastomosis. Tunnel through the popliteal space and the interosseous membrane, below the head of the fibula. This avoids the veins which traverse the normal hiatus in the interosseous membrane.

Surgical Exposure of the Dorsalis Pedis Artery

The dorsalis pedis artery is superficial and readily exposed between the tendons as illustrat-

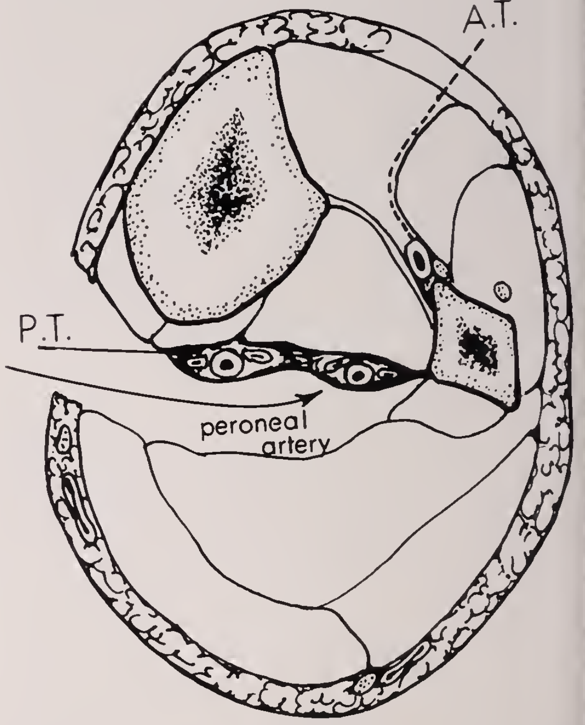


Fig. 3 Cross section of mid-leg: anterior dotted line is the route to the anterior tibial artery. P.T.: posterior tibial artery and veins. Per.: peroneal artery and veins as approached medially.

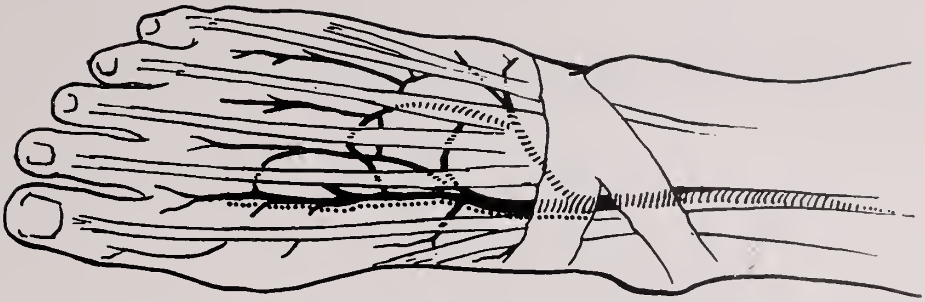


Fig. 4 Incision for the dorsalis pedis artery between the first and second metatarsal bones.

ed in Fig. 4. This was utilized in five patients in whom other vessels in the lower and mid-calf were occluded, narrowed or only short segments were open.

Technique of Distal Anastomosis

A loupe, which magnifies two and one half times, has a convenient focal length, and sufficient depth of field is used. The loupe and the elegant and delicate ophthalmic scissors and forceps have been helpful in suturing a meticulous, precise anastomosis. Five-0 monofilament polyethylene suture on a TE-1 needle glides easily through the vein and fragile arteries. The technique of suture is illustrated in Fig. 5.

End-to-side anastomoses are always used. The vein and artery are handled meticulously. Apply fine pointed pickups only on the adventitia, so as to avoid injury to the intima. Small, smooth Schwartz neurosurgical clips are used to occlude the vessels proximal and distal. We trim the vein so there are no valves close to the anastomosis. The ends of the vein are trimmed as diagrammed. These small arteries are fragile and frequently calcified so no tension is permitted on the vein graft. Mattress sutures can constrict slightly and, therefore, are not advisable in these tiny vessels. Pull the sutures through and set them carefully without buttonholing or tearing the edge of the artery. Regional heparinization is achieved by injecting 3,500 units of heparin in the common femoral artery when the proximal clamps are closed. No systemic heparin or postoperative anticoagulation or dextran have been used.

Closure

Operative arteriograms are seldom necessary but are advisable if there is any doubt about the graft or outflow. Prior to closure, examine the position of the graft in the tunnel with the knee flexed as well as straight. The vein graft must be in a roomy plane or tunnel without any angulation. Do not hesitate to divide any tendons which appear to angulate or constrict the graft in any position of the knee.

The superficial fascia of the thigh and subcutaneous tissue of the leg are closed over the vein graft with fine catgut. The skin is closed with fine continuous nylon sutures. Antibiotics are administered pre- and postoperatively when infected ulcers or gangrenous toes are present. In three patients, debridement, drainage or open toe amputation was performed at the conclusion of the bypass graft. However, if the gangrene was dry, most amputations were delayed for seven to ten days.

Results

We are reporting results in 24 patients with femoral-tibial, peroneal or dorsalis pedis bypass vein grafts.

There were six early failures while the patients were in the hospital (by either thrombosis or death) and all occurred within five days of

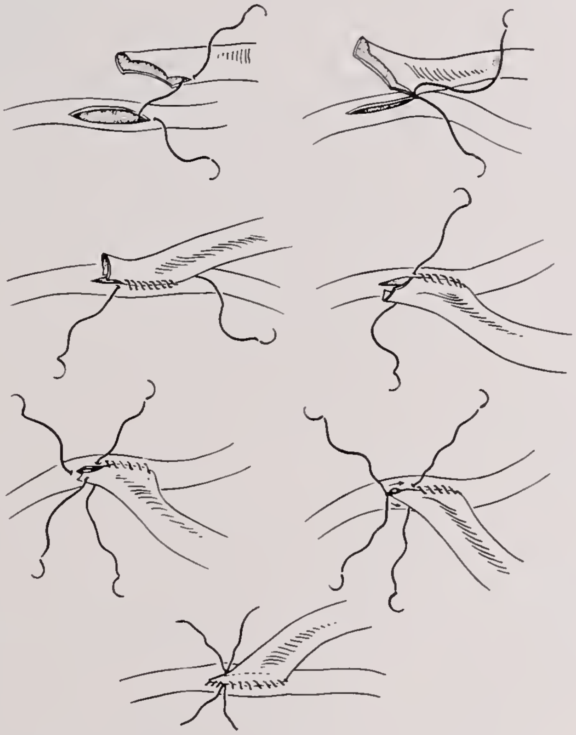


Fig. 5 Technique of end-to-side anastomosis of vein graft to small arteries.

the bypass operation. This is an early success rate of 75%. Three of these six patients died, so the surgical mortality is 12.5%. Of these three deaths, one died of a myocardial infarction with a functioning graft; two died after graft occlusion and major amputations.

The other three early "failures" are still alive. Two of these patients required a below-knee amputation; one had a patent graft but the amputation was necessary because of advancing Bacillus proteus infection. The third is still working and walking with an intact leg and foot. His graft clotted but the rest pain slowly subsided as the collateral circulation improved because of the profunda endarterectomy performed at the time of the proximal anastomosis.

Eighteen patients walked out of the hospital with patent grafts. Two of these have died subsequently at three and 15 months after surgery; one died from renal failure and severe myocardial disease, and the other died of bladder carcinoma. Both patients had patent grafts at the time of their death. A third patient had a graft closure after 6½ years and needed a below-knee amputation. He was grateful for the 6½-year respite because the opposite leg had been amputated many years earlier.

Therefore, at present, subtracting our six early failures and three late ones gives a current patency rate of 15/24 or 62.5%.

All of the discharged (18) patent graft patients had healed feet and relief of ischemic rest pain. In several cases, severe long-standing ischemic neuritis took several months to subside. Several had mild to moderate temporary ankle edema. Superficial gangrene healed in all cases. All toe amputations healed without difficulty. A total of 12 toes were removed in eight patients; three of these were transmetatarsal and the others proximal transphalangeal. In four patients, a toe or toes were amputated as debridement and were left open for drainage. Others were removed electively seven to ten days after the vein graft and closed primarily (Table 6).

TABLE 6

DEATHS AND COMPLICATIONS

Five Failures

Deaths		5
Hospital	3	
Late	2	
Major amputations[*]		5
Myocardial infarction[†]		4
Postoperative sepsis[‡]		2
Minor wound infection		2
Thrombosis of graft[§][‖]		4

[*] 3 survivors.
[†] 1 survivor.
[‡] 1 with open graft.
[§] 1 surviving limb and/patient with a BK.
[‖] 2 additional failures had patent grafts at time of death and BK amputation for sepsis.

Brief narratives of the hospital deaths follow:

Case Reports

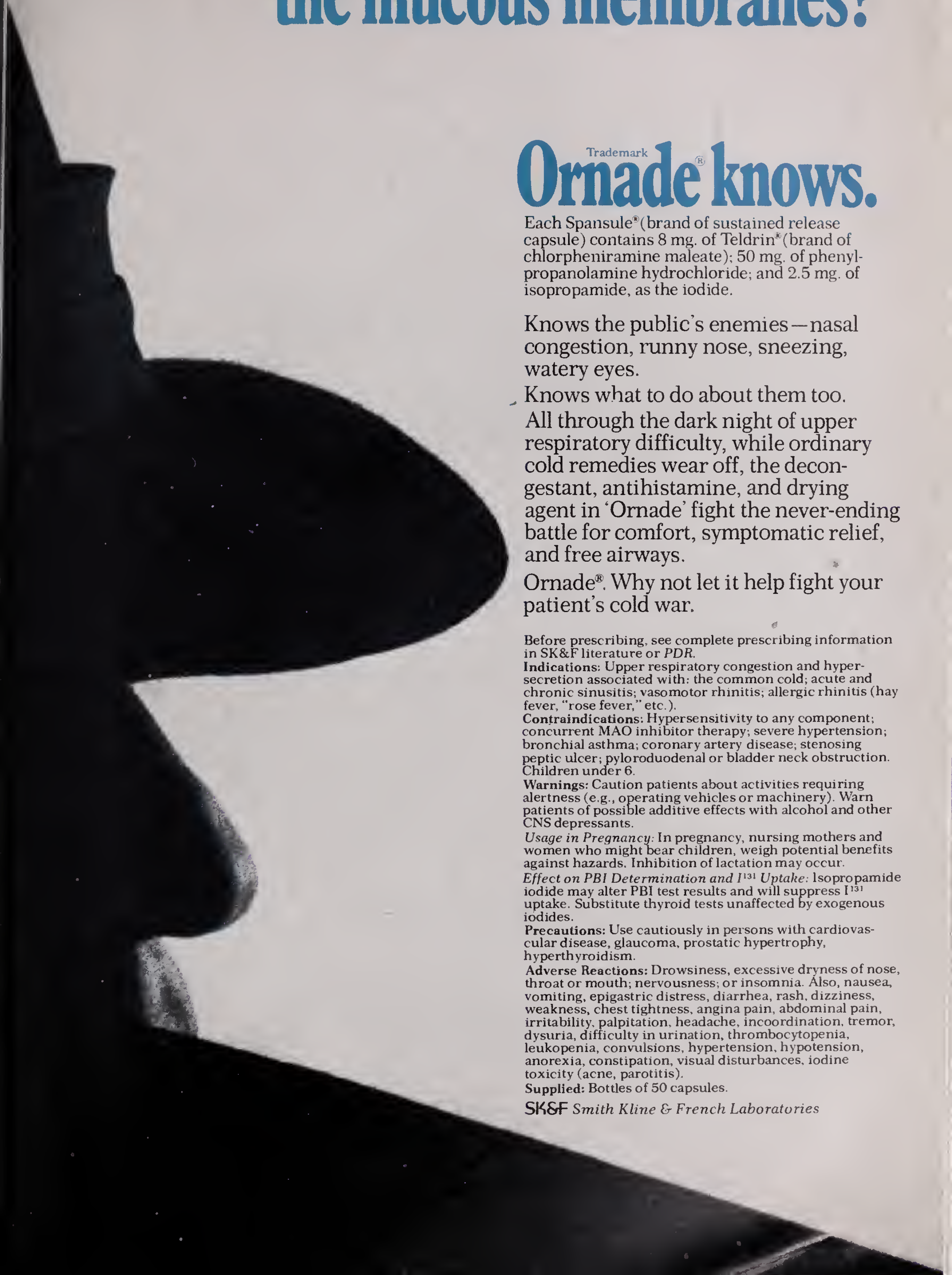
Case # 1. A 65-year-old diabetic man required narcotics for severe pain due to gangrene of two toes and a deep ulcer of the heel. A long graft from the common femoral artery to the posterior tibial artery at the ankle disrupted due to excessive tension on the graft. Another segment was added to the vein graft, and a new anastomosis was completed. Four days postoperatively, the graft clotted, ischemic pain returned and amputation below the knee was necessary. He died suddenly of myocardial infarction 13 days after amputation.

Case # 2. A 79-year-old diabetic woman had severe pain due to a gangrenous ulcer of the fourth toe. Local amputation failed when sepsis developed in a tendon sheath. This was drained but would not heal. A femoro-popliteal vein graft to a stenotic distal popliteal artery clotted within 24 hours. At reoperation, the thrombosis in the graft had extended into the popliteal and anterior tibial arteries. After thrombectomy, the previous graft was lengthened with a new segment from the opposite thigh and a new anastomosis performed on the anterior tibial artery in the mid-leg. This occluded four days later. Infection developed in the incisions and later in the amputated stump, and she died ultimately of septicemia and pneumonia from the resistant organisms.

Case # 3. A 68-year-old diabetic man required narcotics for severe pain due to gangrene of the right great toe. A femoral-popliteal bypass vein graft was performed. The vein was short and, therefore, placed on a distal popliteal artery with poor outflow. A short narrow distal segment of the vein graft was not resected. The graft thrombosed in a few hours. At reoperation, thrombectomy with Fogarty catheters reopened the graft which was then lengthened with another segment of vein and anastomosed to the posterior tibial artery at the ankle. In addition, the narrow segment of vein was resected. The patient died three days later from a myocardial infarction with a functioning graft, free of pain and with a warm foot.

Four of the 24 grafts that thrombosed in the hospital plus the one at 6½ years required major amputation, four BK and one AK. The other two with early failures did not have amputations. One man died from a myocardial infarction. Even though his graft was working, he is

Who knows what evil lurks in the mucous membranes?



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Usage in Pregnancy: In pregnancy, nursing mothers and women who might bear children, weigh potential benefits against hazards. Inhibition of lactation may occur.

Effect on PBI Determination and I^{131} *Uptake:* Isopropamide iodide may alter PBI test results and will suppress I^{131} uptake. Substitute thyroid tests unaffected by exogenous iodides.

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Each white tablet contains:
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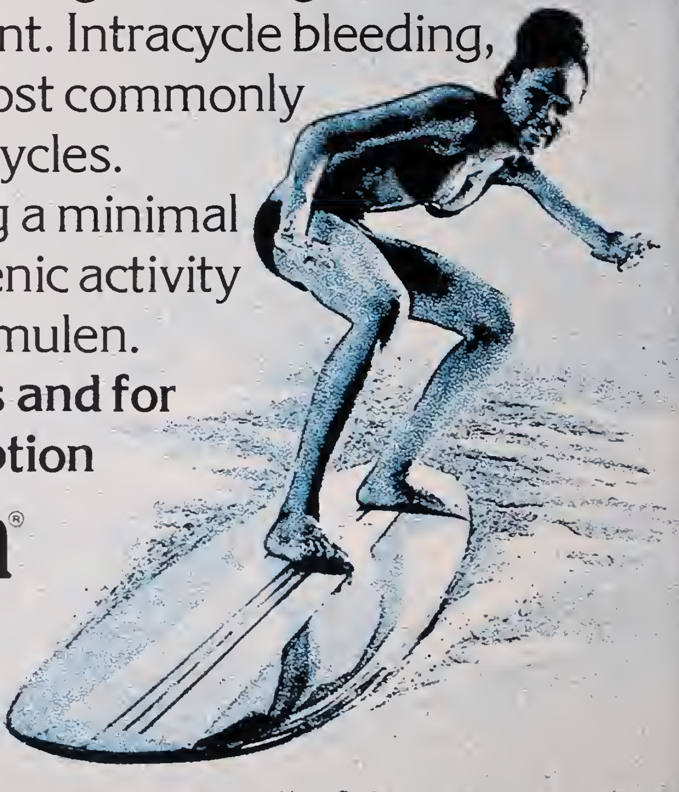
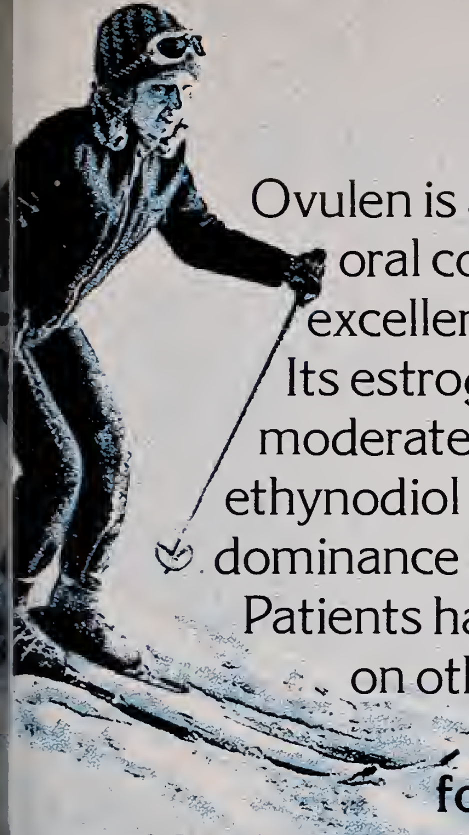


Note: Oral contraceptives are complex medic
They should be prescribed with care on
reference to the prescribing informatio

For brief summary of prescribing information, please see next page.

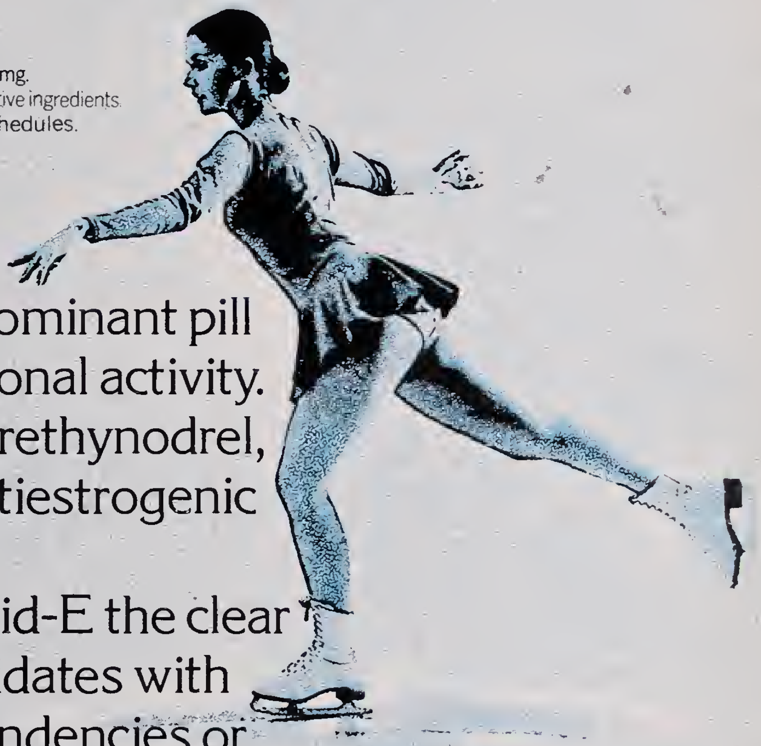


Ovulen is a well-balanced oral contraceptive with an excellent record of patient acceptance. Its estrogen, 100 mcg. of mestranol, is relatively moderate in activity. Its 1 mg. of progestogen, ethynodiol diacetate, gives it a slight dominance in progestational activity. Patients having problems on other pills often do well on Ovulen.

for balanced profiles, with normal menstruation

Ovulen®

Each white tablet contains: ethynodiol diacetate 1 mg./mestranol 0.1 mg.
pink tablet in Ovulen-28® and Demulen-28® is a placebo, containing no active ingredients.
Both Ovulen and Demulen are available in 21- and 28-pill schedules.



Enovid-E is an estrogen-dominant pill with low progestational activity. Its unique progestogen, norethynodrel, is estrogenic and is not antiestrogenic or androgenic in activity. This probably makes Enovid-E the clear choice for those "pill" candidates with ne, hirsutism, masculine tendencies or apparent estrogen deficiency.

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Ovulen®

Each white tablet contains
ethynodiol diacetate 1 mg / mestranol 0.1 mg

Demulen®

Each white tablet contains.
ethynodiol diacetate 1 mg / ethinyl estradiol 50 mcg

Each pink tablet in Ovulen-28® and Demulen-28® is a placebo, containing no active ingredients.

Actions – Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note – Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication – Ovulen and Demulen are indicated for oral contraception.

Contraindications – Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings – The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions – The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives – A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J Coll Gen Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E., Masi, A. T., Arthes, F. G., Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

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Indication – Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

Enovid-E®

brand of norethynodrel with mestranol

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Where "The Pill" Began

listed as a failure. The other case mentioned earlier developed collaterals from the profunda endarterectomy performed at the time of the bypass vein graft. His pain abated and the leg survived.

Some failures may be avoidable. In two patients, a femoral-popliteal graft thrombosed in 24 hours because of poor outflow. The reoperation could have been avoided if the long graft had been the initial procedure. We no longer anastomose vein grafts to "isolated popliteal artery segments." Excessive tension on the vein and the anastomosis is avoidable. Segments of vein less than 4 mm in diameter should be resected and sufficient vein obtained to splice together for adequate length.

Functioning grafts have permitted control of infection in all but one patient who needed a BK amputation to control advancing plantar space sepsis due to a B. Proteus infection. The same complication occurs in occasional diabetics with good pulses and no major arterial occlusions.

Cumulative patency rates[1] are shown in Table 7. Follow-up is still relatively short for most cases. Open grafts are obvious because of strong palpable pulses. Arteriograms have been performed at various intervals postoperatively in nine cases.

TABLE 7

LATE PATENCY

Months at Risk	*Patients at Risk*	Treatment SUCCESS	Treatment FAILURE	*Accumulative Success Rate (%)*
0- 3	24	18	6*	75% (18/24)
4- 6	15	15	0	75%
7- 9	13	13	0	75%
10-12	10	10	0	75%
13-15	7	7	0	75%
16-18	6	6	0	75%
19-21	2	2	0	75%
22+	1	1	0	75%

* These failures less than four days postoperatively.

Discussion

Our technique differs somewhat,[2, 3] as discussed later, but our results are similar to other series reported.[4–8] Follow-up is short, but the procedure deserves further trial. Eighteen of 24 legs were saved; the risks are modest and will be reduced with further experience.

In these cases, the legs were in peril as signified by ischemic pain at rest. Ischemic pain is always an ominous sign. Many cases also had nonhealing ischemic ulcers or gangrene of the toes.

These patients are poor risks for any operation because of their widespread atherosclerosis. They are poor risks for amputation as well as for revascularization. No amputation is performed on our service without detailed arteriograms to map the arteries of the lower leg and foot. If there are no contraindications and if a suitable artery is present, the distal bypass vein graft can be performed with equal or less risk than a major amputation. Two of our deaths occurred early in our experience when the distal bypass was performed only after popliteal bypass grafts had thrombosed due to poor outflow. Two operations are more risky than one and less likely to succeed when the thrombosis, as in one case, extended into the arteries in the upper calf. In similar cases today with poor popliteal outflow, we have found a more suitable site for anastomosis in the lower leg.

Risk can be reduced and success increased by avoiding technical errors. Disruption of the suture line because of tension occurred in one of our cases. This is avoidable when sufficient length of vein graft can be obtained, and we do not hesitate to splice veins from the arm or opposite leg. Segments of vein graft less than 4 mm in diameter are undesirable. This was a probable cause of another failure in the present series of cases and should have been corrected at the first operation. Sufficient vein of adequate caliber can almost always be found. Cephalic and brachial veins are suitable.

The peroneal artery is useful and accessible via the medial approach without resection of the fibula. Lateral tunnels in the thigh and lower leg have been unnecessary for the anterior tibial grafts. We do not perform dilatation of the arteries at the site of anastomosis. It seems hazardous and unnecessary to us.

Some questions can be answered only by longer follow-up, but it appears clear already that early failure is primarily technical and is not affected by the distance between the proximal and distal anastomosis, severity of the ischemia, diabetes or the site of implantation. Our results in the diabetics are similar to the nondiabetics.

In addition to a satisfactory vein, the other requirement for success is adequate inflow and outflow. In two cases, the iliac artery was occluded so that adequate inflow was obtained from the opposite iliac artery by means of a subcutaneous femoral-femoral prosthesis. The atherosclerosis is widespread in these patients but in all the others, the common femoral and iliac arteries were open. Local endarterectomy of the profunda femoris artery in one case improved the collateral flow, relieved the rest pain and healed an ischemic ulcer despite early thrombosis of the femoral-tibial vein graft. Other cases of early thrombosis ended with death or amputation.

Operative arteriograms show prompt filling of the calf and foot, and outflow is excellent despite the small size of the distal tibial or pedal arteries at the site of anastomosis. Measurements of flow by Bernhard[9] have shown this quantitatively. Retrograde as well as distal outflow is desirable. In one pedal anastomosis, which is still open, the recent arteriogram showed only retrograde flow. The length of the vein graft has no influence on the outflow or on the long-term results.

Our present policy is to attach the graft to the midportion of the longest segment of open tibial or peroneal artery. Outflow improves postoperatively with the development of collateral pathways as well as dilation of the recipient artery proximally and distally. Although we have not used sympathectomy, it may be a help to increase the outflow bed.

The optimum site for the distal anastomosis is still unproven. It would be desirable to insert the grafts where any subsequent progression of the atherosclerosis will cause the least harm. Autopsy arteriograms[10] of the legs show that plaques are more frequent and are larger at large bifurcations, including the popliteal branches and in the adductor canal. Data regarding the pattern of plaques and thrombosis in the distal tibial and pedal arteries is scanty, but Wessler[11] has shown that these vessels are frequently open and occasionally normal in legs amputated because of proximal occlusions. Distal anastomosis avoids progressive plaques at the origins of the main branches of the popliteal artery. Inflow to the vein grafts attached on the common femoral artery are less likely to be reduced by the usual progression of atherosclerosis upward in the femoral as reported by Warren *et al.*[12]

Clearly, longer follow-up is needed. Arteriograms at intervals up to 1½ years have been performed in nine cases so far. Longer follow-up and more arteriograms are needed to develop the patterns of atherosclerosis in the lower leg and foot, and the ultimate fate of these vein grafts.

The operation deserves further trial and is advised for patients in whom it can be performed with good prospects of early success with no greater risk than the otherwise inevitable amputation, provided that they have a reasonable life expectancy and their general medical condition will permit ambulation. The only other contraindications are a recent myocardial infarction or renal failure.

CONCLUSIONS

By careful selection of cases, long bypass vein grafts from the common femoral to small arteries beyond the popliteal trifurcation can avoid major amputation, heal ischemic ulcers and gangrenous toes and relieve rest pain from ischemic neuritis. In this regard, there is no difference in risks and successes between the diabetic and nondiabetic patient. Detailed late arteriograms frequently reveal the posterior tibial, peroneal, anterior tibial or dorsalis pedis artery to be suitable for an anastomosis. Veins from the arms or opposite leg can be spliced to reach an optimum site distally. The risks seem modest, and, so far, all patients have preferred this attempt instead of amputation.

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Reprints: Falls B. Hershey, M.D.
Suite 307
Mercy Doctors Bldg.
621 S. New Ballas Rd.
St. Louis, Mo. 63141

JOHN T. BONNER, M.D., *and*
SAMUEL P. W. BLACK, M.D., *Columbia*

Treatment of Intracranial Metastatic Lesions

In the consideration of brain tumors, an obvious classification is into two large groups, primary and metastatic. The primary group then can be subdivided into gliomas, which represent about 50% of intracranial tumors,[1] and the remainder of the primary tumors, such as meningiomas, neurilemmomas and pituitary tumors. The consideration of the primary tumors will be dismissed for the remainder of the discussion.

The group of tumors we shall now discuss are the metastatic. Following our rather simple classification as we have just done with the primary tumors, the metastatic can be subdivided into bronchogenic, which is the most common and represents about one fourth of metastatic brain tumors,[2] and others. These categories constitute the main groupings of all intracranial neoplasms.

Thus, the first point of clinical importance in the metastatic tumors is their high incidence. Reported incidences of intracranial metastases varies from 20%[3, 4] to 40%[5] of all intracranial neoplasms. The next point is that a significant number of these tumors are single metastases and, as such, make the patients possibly good operative candidates. Most would agree that it is futile to operate upon a patient with multiple metastatic intracranial lesions and expect good results or a substantial benefit. Regarding single lesions, in the most recent large series which was reported from Duke University by Vieth and Odom[2] in 1965, the incidence of one metastatic nodule was 56.4%. Although drawn from a large, well-investigated series, this figure is somewhat higher than in most other reports. As they recognized, the true figure probably lies somewhere between this figure and the low figure of 30% in some autopsy series.

The selection of the patient with the single nodule depends on the total clinical evaluation, usually requiring a thorough scrutinizing of the physical examination, EEG, arteriography and brain scan. The recent improvements in brain scanning have made air studies less necessary and less frequent in the evaluation of suspected metastatic lesion, but almost every neurosurgeon has had the experience of treating multiple lesions in which the brain scan, even on review, demonstrated only one lesion.

The pattern of localization of the metastatic lesions has been studied on several occasions. Most find that the greatest distribution is in that of the middle cerebral artery,[6–8] as would be expected with an arterial embolic phenomenon. Other potential pathways are the vertebral vein complex, usually called Batson's veins. The distribution of metastases throughout the brain is roughly what one expects considering the relative weight ratio of the brain,[9] with 48.9% in middle cerebral artery distribution, 8.3% in cerebellum and 1.5% in brain stem. The weight ratio of cerebrum to cerebellum is 9:1 and cerebrum to brain stem, 45:1.[2] Carcinomatous spread through the cerebrospinal fluid also occurs on occasion with resulting "carcinomatous meningitis." However, since this could be the topic of another discussion and, obviously, is not a surgically amenable condition, we shall not consider this further.

An important aspect of the evaluation of cerebral metastases is that no manipulation be allowed that could compromise the patient's neurological status or cause deterioration. A frequent temptation is to completely assess the patient in a detailed and often dangerous method

The occurrence of a single metastatic nodule that can be treated favorably by excision is not rare. The authors report that most autopsy series demonstrate that single lesions occur in at least one third of cases of intracranial metastases. These tumors can now be treated adequately with low operative mortality and morbidity. Even if cure is not obtained, palliation is of benefit since it allows the patient to enjoy useful, enjoyable and longer survival. Doctor Bonner is Assistant Professor of Surgery and Doctor Black is Professor of Surgery, Section of Neurosurgery, University of Missouri School of Medicine.

in order to identify and localize the primary by such methods as proctoscopy, barium enema and bronchoscopy. All these have the capacity to upset what may be a delicate intracranial dynamic balance by a Valsalva maneuver or hypoxia. In addition, these studies often are unnecessary because if the patient is a candidate for potential craniotomy to remove the metastatic lesion, the primary diagnosis often can be made from the histology of the removed tumor. Also, once the mass has been removed, these diagnostic manipulations have less possible morbidity if the identity of the primary is still unclear.

The next consideration is the possible types of tumors which metastasize intracranially.

The tumors of the Duke series[2] most frequently metastasizing to the brain were as follows:

1. lung, 27%
2. breast, 16.3%
3. melanomas, 15.7%
4. those of unknown origin, 14%
5. genito-urinary system, 7%

Thyroid, gastrointestinal system tumors, skin, nasal sinus tumors and sarcomas also participate to a significant degree. Other series have shown a greater incidence of genito-urinary system tumors, especially hypernephroma.[10–12]

The high incidence of lung tumors is especially remarkable, with various autopsy series demonstrating that brain metastases in lung carcinoma occur in 17% to 53% of cases.[13, 14] Another of the features of metastases is that a large number, up to 45.4%, produce intracranial symptomatology before their primary does. This occurs especially with the lung.[15] In the University of Washington experience,[16] about 10% of bronchogenic carcinomas first manifested themselves by their intracranial metastases, with about 35% ending with metastases in the brain.

The prognosis of the patient with the single intracranial metastasis varies to a great degree according to the tumor involved. Unfortunately, the most common, the bronchogenic, has the worst prognosis with only 3% in the Duke series[2] living more than one year postoperatively. Longer survivors are certainly not unknown. We should be able to do better even with lung carcinoma, however, as good long term survival is possible. This is supported by Galluzzi[17] in an autopsy series study of lung tumors showing 36% having single metastatic lesions and 40% with the single nodule being unassociated with other metastases. If these patients could be seen sooner undoubtedly their prognosis would be better. Other survival times of more than ten years at the time of the reports have been cited with other tumors.[2]

Much can be gained from the treatment of single intracranial metastatic lesions, especially with improved anesthesia and the help of corticosteroids to decrease the marked edema which characteristically accompanies them.[18] This results in low operative morbidities with useful and functional survivors.

The patient with multiple metastases, who is obviously not an operative candidate, can often obtain remarkable improvement both subjectively and objectively using corticosteroids which decrease the associated cerebral edema. This is a double-edged sword in that once a patient has progressed to a terminal state due to the metastases, the terminal course can be shortened significantly by discontinuing the corticosteroids, which may be desirable from both the patient and family standpoint.

In summary, aggressive treatment of intracranial metastatic lesions is both feasible and desirable. Worthwhile salvaging of functional and enjoyable longevity in many cases, as well as increasing likelihood of cure in some cases, can result.

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ROBIJN K. HORNSTRA, M.D. *and*
BESS UDELL, ***Kansas City***

Psychiatric Services and Alcoholics

THIS STUDY attempts to catalogue two populations of alcoholics as they relate to psychiatric treatment facilities in the Metropolitan Area of Kansas City.

Because of the complications in the study of alcoholism that are due to lack of standard definition and the undefined role of psychiatry in treatment, it was thought that research of this nature would at least establish what patterns of treatment have evolved in a large urban area with several different psychiatric facilities. Also, the characteristics of these populations are compared to gain a statistical profile of the people with alcohol problems, who either have applied for or are in treatment in one of the facilities. The results of this study are compared with other findings of similar studies.

The implications of the findings for the psychiatric community will be suggested in the discussion.

METHODOLOGY

The psychiatric facilities surveyed were The Western Missouri Mental Health Center (WMMHC), a state-supported community mental health center; the three state hospitals serving Kansas City; The Veterans Administration Hospital in Kansas City and 36 or 86% of the 42 psychiatrists in private practice in Kansas City.

Those patients who lived in the seven-county area surrounding Kansas City were counted with the majority of patients coming from Kansas City proper. Data on patients residing in Kansas were not included. The data collected are descriptive in nature and will be used to answer such questions as "Who seeks help for alcoholism? Which facilities are most frequently used by alcoholics? How do they find their way to the facilities offering this help? Do they seek this help voluntarily? Are alcoholics substantially different from other diagnostic groups who receive or apply for help at psychiatric facilities?"

To achieve understanding about the utilization of psychiatric services, there is analytic utility in studying two patient populations. The first patient population is all patients applying for psychiatric services over a year's time. This patient population will be referred to as the *One-year Applicant Population.* It should be noted that applicants rather than applications for treatment are counted. No matter how often a person might apply during a year, he will be counted only once as an applicant. The second population referred to is the *One-day Prevalence Population.* This population consists of patients in treatment on a given day. These data were collected for the year 1968. Another report of the Field Station will describe some technical considerations in greater detail. The analytic utility for using and comparing the two patient populations is derived from the fact that the one-year applicant population captures the traffic flow, short and potential long-term users, while the one-day prevalence population captures in its count not only patients recently entering treatment but, also, those who have stayed in treatment for long periods of time.

RESULTS

Service Utilization Ratio

The two populations recorded can be related by comparing the numbers in each by the diagnostic category of persons. This yields a crude indication of the length of treatment. If many applicants are recorded throughout the year for each patient in treatment on a given day, one can assume a rapid turnover and short term treatment. As indicated in Table 1, alcoholism has the highest ratio of applicants to the preva-

This article presents data concerning the clinical and sociological make-up of alcoholics applying for or in treatment in specific types of facilities in a metropolitan area. Results of the study indicate that their alcoholic "problem" has manifested itself by isolation from the family, economy and the larger society, and the referral paths are socially defined. In this particular study, psychiatric care is the only aspect of treatment considered. The authors are from The Greater Kansas City Mental Health Foundation. This work was supported by the Center for Epidemiological Studies, NIMH Contract #43-67-1324.

TABLE 1

ONE-YEAR APPLICANT/ONE-DAY PREVALENCE RATIO

Diagnostic Categories	*Ratio*
Organic brain syndromes	1.4:1.0
Schizophrenic reactions	0.9:1.0
Neuroses	2.2:1.0
Alcoholism	5.9:1.0
Personality disorders	2.2:1.0

lence population in all of the diagnostic categories.

Expressed in another way, Table 1 demonstrates that alcoholic applicants over a year's time far outnumber the alcoholics found in the one-day prevalence population in comparison with any other diagnostic category. Subsequent analysis will deal with the applicant population, unless otherwise specified.

Facilities

Traditionally, public or private charitable institutions, including those that are rehabilitative, custodial and punitive, have inherited the responsibility for dealing with alcoholism. Even though this problem has been recognized as belonging to the domain of private and public psychiatric practice, most (94%) of the alcoholics seeking professional psychiatric help in the Kansas City area in Missouri came to or were brought to public facilities.

It is obvious in Table 2 that public facilities in general and the Western Missouri Mental Health Center in particular bear the burden of providing services to alcoholics. Another way of looking at the distribution of alcoholics is shown in Table 3.

TABLE 2

ALCOHOLIC APPLICANTS FOR ONE YEAR ADULTS ONLY, BY FACILITY, NUMBER AND PERCENT

Facilities	*Applicants* NUMBER	PER CENT
Western Missouri Mental Health Center	1,092	80
State hospitals	160	12
VA hospital	24	2
Private sector	84	6
Psychiatrists		
Psychiatric hospitals		
	1,360	100

TABLE 3

PERCENTAGE OF EACH FACILITY'S APPLICANT POPULATION DIAGNOSED ALCOHOLIC ADULTS ONLY

	Applicants		
Facilities	ALCOHOLICS %	ALL OTHER APPLICANTS %	TOTAL %
Western Missouri Mental Health Center	23	77	100
State hospitals	30	70	100
VA hospitals	6	94	100
Private psychiatric sector	3	97	100
Total	15	85	100

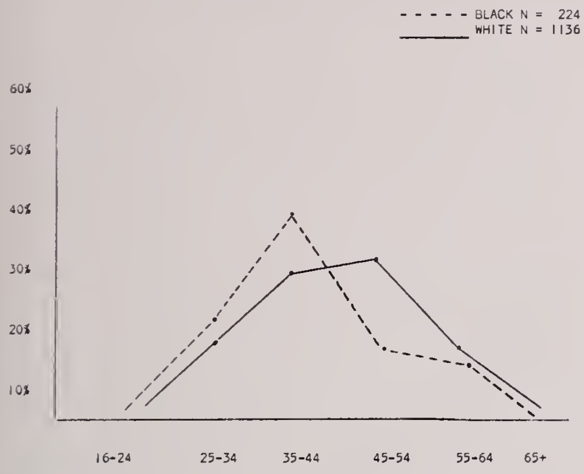
To explain why this lopsided burden falls on public facilities, one might be tempted to speculate that the diagnosis of alcoholism was influenced by social class. It might be that the private psychiatrists who see more middle class and upper middle class patients than do public facilities would be prone to give their patients a diagnosis "more acceptable" than alcoholism. However, data collected on presenting problems, problems stated by the patient and/or referral source as the reason for seeking help show that drinking problems were among the top "presenting problems" at Western Missouri Mental Health Center, but were not for private psychiatrists.

Most alcoholic applicants were middle aged: 66% of the alcoholics were between 35 and 54 years of age with the remaining 34% being evenly divided between the 18-to-34-year and the 55-and-over age groups. Black alcoholics tend to be younger than their white counterparts. Forty-three per cent of the black alcoholics were between 35 and 44 years of age and 18% were in the 45 to 54 age group, whereas 31% of the white alcoholics fell into these age groups, respectively. Seventy per cent of the black alcoholics were under 45 years of age, but only 46% of the whites were in the under-45 age group. Whether the young age of black alcoholics compared to the white alcoholics is a function of earlier onset of drinking among black applicants or results from the fact that members of minority groups are more susceptible to receive the discriminatory label of alcoholism is an unresolved question. Table 4 compares white and black alcoholics by age, using percentage rather than actual numbers to illustrate the relationship.

Of the 1,360 alcoholics in the one-year applicant population, 84% were men and only 16% were women. Male alcoholics accounted for 25% of all adult male applicants while female alco-

TABLE 4

ALCOHOLICS BY AGE GROUPS AND RACE—IN PER CENTS ONE-YEAR APPLICANT POPULATION



holics accounted for only 5% of all adult female applicants.

Blacks comprise 16% of alcoholic applicants in the seven-county area in which blacks make up 11% of the general population. They comprise 20% of alcoholic applicants at Western Missouri Mental Health Center. The ratio of white alcoholics to black alcoholics is five to one for all facilities and four to one at Western Missouri Mental Health Center. At the state hospitals, however, less than 5% of the alcoholics were black.

A slightly larger proportion of all black applicants (3% to 4%, both men and women) are diagnosed as alcoholic than are the white applicants. In discussing other variables, sex and race differences will be mentioned only when they are substantial or unexpected.

Living Arrangements and Marital Status

Although there is a good deal of variation among diagnostic groups on these two variables, alcoholics had proportionately fewer married applicants (36%) and more applicants living alone 37% than did the other diagnostic categories (Tables 5 and 6). Fifty per cent of the alcoholics were divorced, widowed or separated and only 14% were never married. The percentage of divorced, widowed or separated in the other diagnostic categories is between 20% and 26% with the exception of the Organic Brain Syndromes (OBS) diagnostic group. Applicants diagnosed as OBS, naturally, are older and more likely to be widowed than divorced or separated, in line with proportions reported for the general population.

TABLE 5

ADULT APPLICANTS DIAGNOSIS BY MARITAL STATUS
(by percentage)

	Marital Status			
Diagnostic Categories	SINGLE %	MARRIED %	DIV.-WID.-SEP. %	TOTAL %
Organic brain syndromes	14	47	39	100
Schizophrenia	29	45	26	100
Personality disorders	31	49	20	100
Alcoholism	14	36	50	100
Neuroses	16	71	25	100

TABLE 6

ADULT APPLICANTS DIAGNOSIS BY LIVING ARRANGEMENTS
(by percentage)

	Living Arrangements				
Diagnostic Categories	ALONE %	WITH SPOUSE %	WITH OTHERS %	UNKNOWN %	TOTAL %
Organic brain syndromes	21	43	34	2	100
Schizophrenia	19	44	34	3	100
Personality disorders	21	48	28	3	100
Alcoholism	37	34	24	5	100
Neuroses	16	60	22	2	100

In looking at source of referral for alcoholic applicants, we find that coercion plays a large role in bringing alcoholics to treatment facilities (see Table 7). Almost one third (30%) of alcoholic applicants were referred by legal agencies (police, jail, courts). For black applicants, the proportion referred by legal agencies was 50%. These figures are for all treatment facilities combined and, as such, tend to obscure the fact that while only 26% of white alcoholics overall were referred by legal agencies, one third of the white alcoholics at Western Missouri Mental Health Center were referred by legal agencies. The reason for this discrepancy is that alcoholics at the state hospitals are different from those at WMMHC. They have little chance of being referred by police since admission or commitment to a state hospital is based on a medical opinion rather than on the opinion of a police officer or jailer. In brief, the state hospital probably is not the first treatment facility with which an alcoholic has had contact but, more than likely, it is the second or third.

Another look shows that for an overall 21% of the alcoholics, the referral was "self" and for

TABLE 7

ALCOHOLICS BY REFERRAL SOURCE
(by per cent)

				Applicants			
		WHITE			BLACK		
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	*Total*
	N=964	N=176	N=1,140	N=184	N=40	N=220	N=1360
Referral Source	%	%	%	%	%	%	%
Self	22	11	21	17	30	20	21
Family	14	21	16	7	0	5	14
Private doctors	8	5	7	0	0	0	6
General hospital	7	18	9	13	10	12.5	9
Police	27	26	26	48	60	50	30
Unknown	22	19	21	15	0	12.5	20
	100	100	100	100	100	100	100

20%, it was “unknown.” Self-referral implies that the person came alone for help, but the records do not differentiate between being placed in a taxicab, abandoned at the front door and other ways of arriving for treatment alone. Similar speculation surrounds the group with unknown referral sources. This category most likely represents people who arrived on their “own” and were acutely intoxicated. Recording the referral pathway would be one of the remote concerns for the treatment personnel for these patients at that time.

Comparison With Other Studies

Alcoholism or excessive drinking is not restricted to any one group in society.

> “From other research, it is obvious that most excessive drinkers are not skid-row derelicts. More than 70% of them reside in respectable neighborhoods, live with their husbands or wives, try to send their children to college, belong to the country club, attend church, pay taxes, and continue to perform more or less effectively as bank presidents; housewives; farmers; salesmen; machinists; stenographers; teachers; clergymen, and physicians.”[1]

In contrast to this description, however, one finds, with a few exceptions, that the alcoholics seeking psychiatric treatment are quite different from the above description. For example, the typical alcoholic patient from this study is a male of middle age who has been but is no longer married and who is either unemployed or marginally employed. And, furthermore, the typical alcoholic in this study is comparable to the findings of other studies of treated alcoholism.

In two studies of first admissions to public mental hospitals in Ohio, Locke found higher rates of admission for alcoholic psychoses among the following: men, divorced and separated individuals, middle-aged persons and persons working as craftsmen, operatives and laborers, with the laborers having the highest rate of admissions.[2, 3]

Nathan *et al*, reporting on an alcoholism clinic in Boston, found that the applicants had characteristics similar to the applicant group reported here. In the Boston clinic, the typical patient was a middle-aged, white man who was not married but had been, and was unemployed or marginally employed.[4] In a study of a nonpsychiatric facility which deals with numerous alcoholics, a Salvation Army Men’s Social Service Center, Katz found a similar configuration of characteristics.[5]

In a study comparing five other studies on the employment characteristics of hospitalized alcoholics, Chardorkoff found that while the percentage of unemployed patients varied from hospital to hospital, the patients generally came from the lower occupational groups.[6]

While many alcoholics do have employment problems, there is evidence that many alcoholics have good work histories and that their employment problems are recent.[7] Be that as it may, studies on treatment outcomes for alcoholics generally agree that employment, being married and living with wife, and a history of having worked in a skilled or semi-skilled occupation at one time are related to successful treatment outcome.[8-10] Age also appears to affect treatment outcome in that younger alcoholics seem to respond better to inpatient treatment while older alcoholics respond better to outpatient programs.

Discussion

In discussing the findings of this study, it is necessary to emphasize the nature of the study population. We have not dealt with all alcoholics in the metropolitan area but, rather, those persons applying or in treatment in specified types at facilities.

This study offers strong evidence that the population of applicants consists of groups of persons who have been *socially* defined. These people are not a cross section of excessive drinkers but, rather, a population whose alcohol "problem" has manifested itself by isolation from the family, economy and the larger society. Also, the referral paths are socially defined. Difference by age, sex, race and social class all point to the fact that the paths to psychiatric treatment can be found in the web of social control which has developed in the urban milieu of metropolitan areas.

It is important to keep in mind that psychiatric care is only one possible aspect of treatment and the only one considered in this study.

The findings demonstrate that the public sector of psychiatry is, for all practical purposes, the psychiatric care-giver for alcoholics, because private psychiatrists infrequently deal with alcoholics. Undoubtedly, general medical practitioners encounter many alcohol-related problems in their practice and many patients are hospitalized for observation and diagnostic studies for alcohol-related conditions. Despite the fact that alcoholism is pronounced a disease, the practitioners of medicine and very likely their patients shy away from the label of chronic alcoholism on hospital charts and insurance claim forms, as a primary or secondary diagnosis.[11] This practice is not only related to avoid stigma, but also motivated by financial consideration.

Thus, moral attitudinal considerations will continue to present major obstacles for programs aimed at early treatment, the guessing game about the incidence of alcoholism in the general population will go on and data about the natural course of alcoholism will need to be obtained in indirect ways.

Public psychiatric facilities also are subject to the social implications of the label of alcoholism but in a different way from that of the private practitioners. To begin, a large number of alcoholics seeking help are in one way or another coerced into seeking treatment. Indicative of this is the larger number of applicants referred by police and family or friends.

Aside from this kind of direct coercion towards treatment for the individual alcoholic, another more indirect form of coercion takes place. Psychiatric treatment for alcoholism is much more a last resort than a treatment of choice. This form of coercion is reflected in the number of applicants who are relatively isolated socially and are having employment problems. In fact, it appears that most alcoholics do not seek treatment until their ability to function and maintain themselves in society has been severely impaired; that is, social rather than medical considerations play a large role in bringing alcoholics to psychiatric facilities. In view of this fact, treatment programs will be approached from the perspective of the social function correlates of alcoholism.

This approach is not intended to deny the importance of the medical aspects of alcoholism, however. There is still a great need for psychiatric services to deal with the acutely intoxicated alcoholic. In fact, detoxification services may be required by the bulk of the alcoholics seeking help at public facilities.

A majority of those applying for treatment in the Kansas City area and elsewhere are not prime candidates for most alcoholic programs. There is strong evidence to suggest that persons labeled as alcoholic are a diverse group and that different treatment programs with somewhat different goals should be matched with the kind of problems and potentials of the individual alcoholic. It may even be that there is need for programs that do not attempt a relatively quick "cure" but rather one aimed at decreasing the friction between the alcoholic and society which manifests itself in arrests and incarceration for drunkenness, disturbing the peace and other reasons.

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Reprints: Robijn K. Hornstra, M.D.
The Greater Kansas City
Mental Health Foundation
600 E. 22nd St.
Kansas City, Mo. 64108

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All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

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First choice

MUDRANE-2

When ephedrine is too exciting or is contraindicated

MUDRANE GG

During pregnancy or when K.I. is contraindicated or not tolerated

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President's Message

The predicted hubbub and furor over the NBC-televised program "What Price Health?" on Tuesday, Dec. 19, 1972 at 9 PM (CST) evolved as anticipated. Probably the most responsive action was taken by the Oklahoma State Medical Society which sent telegrams to the other 49 state organizations urging them (and the AMA) to demand equal time under the Fain Fairness Doctrine. Calling it a "distorted presentation," they recommended immediate national and local action. The AMA replied that while the program was "propaganda, pure and simple," listener ratings were estimated to be seven to eight times as great for "Marcus Welby, M.D." heard at that same time on another network. They concluded that "It is our considered judgment that the program will generate a minimum of continuing comment unless we, by public action, elevate a dull, little-watched show to the stage of national controversy."

My own feelings were these. I felt that the medical facts and statistics cited were as accurate as the geography—"The Lowry family residing in East St. Louis, *MISSOURI.*" In the case of the young black child with the damaged heart who lived on the sixth floor of a ghetto tenement, the family had been trying to be moved to a lower floor for over a year but nothing had been accomplished. That, Mr. Newman, is the same bureaucracy or one of similar ilk which will be in charge of your health care in the event the Congress chooses National Health Insurance.

Walter T. Gunn, M.D.

The Commission on Professional and Hospital Activities is holding a Professional Activity Study (PAS) and a Medical Audit Program (MAP) on Thursday, Feb. 22, 1973 at the Hilton Inn, 10330 Natural Bridge Road (across from the Airport) in St. Louis. Registration begins at 8:30 AM, followed by programs from 9 AM until 4 PM. Anyone interested in these activities should immediately contact CPHA at 1968 Green Road, Ann Arbor, Mich.

On page 49 of the Jan. 8, 1973 edition of *Newsweek*, there is an article on the Federal Drug Administration. It asks the question—do these harmful effects of the more stringent standards outweigh the good effects of the "correct decisions" made by the FDA officials? The article concludes with the following sentence, "Indeed, further studies may well justify the even more shocking conclusion that the FDA itself should be abolished."

Some confusion as to the MSMA state dues has resulted from the dual billing system adopted by most of the county societies this year. The total amount is $75 of which $65 is actual dues and $10 represents the assessment for the Missouri State Medical Foundation (Medical Student Loan Fund). As of March 31, 1972, the dues are the lowest, except for three, in the 50 states. The Student Loan Fund, since its inauguration up to Dec. 15, 1972, had raised $309,588.58. Three hundred and sixty-eight medical students (all residents of Missouri) have been aided. Seventy-nine have repaid their loans in full. The total repayments have amounted to $102,331.92 plus interest of $18,574.13.

At the time of this writing, some 720 bills have been submitted to the Missouri Legislature. Close to 100 have some health connotation. In addition to the daily personal care which you give your patients, your dedication in medicine also requires that you work for the best health regulations for all the citizens of Missouri. If you feel motivated to help in this effort, contact your District Councilor, the MSMA executive office or Dr. John I. Matthews, head of the MSMA Legislative Committee in Jefferson City.

See you in St. Louis on March 29.

Woman's Auxiliary

The "FOUR Rs" and the Communications GAP

In dealing with that well-known organizational problem of the "communications gap," our Woman's Auxiliary learned the importance of establishing priorities. In trying to learn to establish priorities, we realized that our best tools are the "Three Rs plus one. . . . reading, 'riting, 'rithmetic and rhetoric (verbal communication)."*

The first three "Rs" are our old reliables and have served us well. However, "rhetoric" has become increasingly important and effective in enabling us to increase our understanding and knowledge of problems concerning health care and organized medicine and, also, in helping us to accomplish our own projects and goals in their behalf. We appreciate the opportunities we have to attend the MSMA Council meetings and the MSMA Public Affairs Conference (Feb. 3-4, Jefferson City) as well as numerous other MSMA, AMA and other state and national health care-related meetings. Thank you for the rhetoric. It all has helped to bridge our communications gap.

Mrs. Keith D. Jones
President

More Examples!

Many of our Auxiliary members will attend the Second AMA National Congress on the Quality of Life on March 7-9 at the Palmer House in Chicago. At this Congress, we will study life in the middle years (ages 25-65), a subject vital to all of our families and communities. In fact, we have been asked by the AMA Auxiliary Health Education Chairman to assist in promoting this program by alerting other organizations in Missouri.

I will take special pride in attending the AMPAC meeting in Washington because we are almost certain that our MSMA Auxiliary has attained one of the greatest increases this year in women's memberships in AMPAC and MMPAC. We hope to do even better in 1973, so why not send your $99 for your sustaining membership now or, better still, add an additional $15 and make it a family membership. Remember that your wife's county auxiliary will receive the credit.

And, speaking of rhetoric, it has been a special pleasure for me to attend some of the MSMA Councilor District meetings. In areas that do not have an organized auxiliary, I have had an opportunity to personally meet and invite the doctors' wives to join our MSMA Auxiliary as members-at-large.

Attention, Physicians' Wives!

At the organizational meeting of the Missouri Uterine Cancer Task Force chaired by Dr. MacDonald Bonebrake, Springfield, on January 7 in Jefferson City, it was suggested that an excellent start toward accomplishment of the Task Force goals would be for every physician's wife to obtain her annual Pap Test. In addition to protecting her own life, think of the impact her example will set for every other woman in the state to follow.

---

* **This last "R" also has to do with another letter of the alphabet, the five "Ts": telephone, telegraph, television, telestar and, best of all, "tell a woman."**

EDITORIAL

HEALTH CARE, A RIGHT?

At the recent M.D. Day program at the University of Missouri, Columbia, School of Medicine, a very excellent scientific program was presented in the two-day seminar. However, two discussants spent valuable time in talking about the health care delivery system and how it is going to have to change and be modified to meet the growing health care demands of our population. One of these discussants was the Dean of the Case Western Reserve University School of Medicine, and the other was the Executive Vice-President of Johns Hopkins Hospital, both M.D.'s. Each started his remarks with the statement, "Now that health care is a right of citizenship." Each man then went on to describe the dilemma in which medical educators, doctors, hospital administrators and others in the health care field find themselves in trying to provide for this new "right." One of these gentlemen literally threw upon his hands and could see very little light at the end of the health care tunnel because of maldistribution of health care personnel, increasing costs of health care, insufficient manpower, the maintenance of quality in the light of increased demands by the population, care of the indigent, etc. The other doctor would solve all our problems by herding our doctors and citizens into giant health maintenance organizations with primary care being given by para-medical personnel and by using assembly line automated approaches. Not once did either man question the original premise that has created the mess in the health care field—that health care is a right of citizenship.

Since pre-Medicare days, and perhaps long before that, ambitious politicians, social reformers and labor union leaders have injected the concept that health care is a right of citizenship into the thinking of the average American citizen.

If one ponders this development, even momentarily, he has to be amazed that this declaration of health care is a right—which is of such momentous importance to each American citizen—has not been vigorously debated by our country's philosophers, judicial experts, leaders of medicine and our watchful journalists.

This concept became national policy by fiat.

A "right" merely defines a freedom of action—free speech, peaceable assembly, press, etc. The only right that a government can guarantee, then, is that of freedom of action in those areas outlined by our constitution.

Health care is a service, provided by doctors and others functioning in a free society, to people who wish to purchase it. Providing such a service, then, is the means the health care provider has of earning a living—and it is his means of supporting his life.

If health care could conceivably be considered the "right" of the patient, that "right" should and would be properly protected by governmental law. Since the ultimate authority of law is the force of arms, it logically follows that it is under this threat that the doctor's professional judgment and his ability to earn a living is being coerced. Sound far fetched? Then consider Quebec in 1970 when Canadian physicians, objecting to a new Medicare law were forced to continue working under penalty of jail sentence, and fines up to $500 per day while away from their practices; and for those who spoke out publicly against the bill, a jail sentence of up to one year and a fine of $50,000 per day were imposed.

A government of free people does not have the prerogative to proclaim a "right" for one group of citizens (the patients) if the provision of that "right" usurps and destroys the freedom of another group (the doctor and health care providers).

If the "right" to health care belongs to the citizen, he starts owning the service of the health care provider, without the necessity of earning them or receiving them as a gift from the only man who has the right to give them, the provider himself. Consider the behavior of some of the board of Mid-America Comprehensive Health Planning Agency in this light, with the preponderance of its consumer members.

It is simply remarkable that the medical profession in the United States has never really "called" our government on this absurdity—that medical care is a "right" of citizenship. We quietly acquiesce and allow ourselves to be led down the road of civil servitude without even a muttering. It is long past due that those of us in the medical profession being to speak out with loud clear voices, to tell it like it is, to resist at every point the daily incursions into our professional lives by government; and time, too, that our medical leaders begin to employ the same incisive logic in their efforts to deal with the dilemma of health care that they might to a perplexing clinical problem—that is—get at the cause (declaration of health care as a "right" of citizensip) instead of flailing aimlessly at the symptoms.

DONALD E. KUENZI, M.D.
Member, Editorial Board
Greater Kansas City Medical Bulletin

LETTERS to the Editor

Joseph V. Finnegan, M.D., Editor
Missouri Medicine
515 East High St.
Jefferson City, Mo. 65101

Dear Doctor Finnegan:

While the discussion of the "Suicidal Patient" by Drs. Sletten and Evenson in the November, 1972 issue was excellent, certain problems in the management of the severe depressive should be amplified, with the suicidal risk ever in mind.

1. The various antidepressive drugs simply have not been as effective in the severely depressed suicidal patients as some enthusiasts in the literature would have us believe.

2. The authors state, "If one is unable to have someone with the patient during this period, the next best thing is to place the patient in a locked ward." The Psychiatric Unit at the St. Louis University Hospital has no locked doors, and depressed patients have been treated in this setting with no problem, and, to my knowledge no suicides, over ten years of operation. I, personally, have not used a locked ward to treat a suicidal or depressed patient for many years and see no reason to change this procedure. The authors themselves note that suicides can occur in locked rooms, and the overall impact of hospitalization is such that adequate therapeutic atmosphere can be obtained without locked doors.

3. I saw no mention in the article of electroconvulsive therapy, which can be lifesaving and interrupt a tortuous form of life for the severely depressed patient. Such patients frequently do not benefit from psychotherapy or the usual antidepressive drugs while in the acute severe stage of their depression, and I feel the patient is done an injustice when electroconvulsive therapy is not suggested or withheld. While, as the authors indicate, we can challenge concepts of hopelessness and despair in suicidal patients, there are many such patients who will not do well in a reasonable period of time unless we as physicians do something for them. Hospitalization and/or electroconvulsive therapy may be lifesaving.

Sincerely,
Jack R. Eidelman, M.D.
St. Louis

In Memoriam

Heyer, Oscar C., M.D., 7714 S. Broadway, St. Louis, a graduate of the University of Munich and Jena, Germany, 1917; member St. Louis Medical Society; age 86, died Oct. 15, 1972.

Francka, Wenceslaus Frank, M.D., Hannibal, a graduate of St. Louis University, 1924; member Marion-Ralls-Shelby County Medical Society; age 72; died Dec. 2, 1972.

Duden, Charles W., M.D., 1011 Beaumont Bldg., St. Louis, a graduate of Washington University, 1926, member St. Louis Medical Society; age 71, died Dec. 20, 1972.

IMPROVED ACCIDENT & HEALTH PROGRAMS

The Disability Income Policy sponsored by the Missouri State Medical Association since 1943 has now been made GUARANTEED RENEWABLE and income benefits are available up to $300.00 weekly to members under age 56 subject to acceptance by the Company.

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County Society News

FIRST DISTRICT

COUNCILOR
JOHN N. MARTIN, M.D., ST. JOSEPH

Buchanan County Medical Society

The 71st annual meeting of the Buchanan County Medical Society was held at the St. Joseph Country Club on Dec. 6, 1972. The event included a dinner dance and installation of officers.

Dr. Lawrence H. Pifer, President for the past year, presided and served as installing officer. New officers who were installed were Drs. Elza F. Butler, President; Randal W. Weed, President-Elect; William B. O'Connor, Vice-President; G. Tyson Carpenter, Secretary; and Robert W. Kieber, Treasurer. Doctor Kieber is serving his 20th consecutive year in this office.

Dr. Richard L. Maginn was named to the Board of Censors. Delegates to the Missouri State Medical Association are Drs. John T. Rogers and Ernest E. Wadlow. Alternate Delegates are Drs. R. Philip Acuff, William B. Rost and Donald J. Stallard. Dr. Edmund W. Kline is serving on the Committee on Public Policy, Dr. Richard O. Craig is on the Board of Trustees and Doctor Pifer is on the Executive Secretary Committee.

After the dinner and installation, the Bowman Trio provided music for dancing.

G. Tyson Carpenter, M.D., *Secretary*

Grand River Medical Society

Fifty members, Auxiliary members and guests attended the annual Christmas Dinner Party of the Grand River Medical Society at the Strand Hotel in Chillicothe on Dec. 14, 1972.

Guests present were Dr. John N. Martin, St. Joseph, First District Councilor, and Mrs. Martin; Mr. Ray McIntyre, Jefferson City, Executive Secretary of the Missouri State Medical Association, and Mrs. McIntyre; and Mr. Royal O. Cooper, Jefferson City, Assistant Executive Secretary of the MSMA.

Dr. Walter T. Gunn, President of the Missouri State Medical Association, was unable to attend the dinner because of weather conditions.

Following brief, interesting and informative speeches by Doctor Martin, Mr. McIntyre and Mr. Cooper, the evening was devoted to dancing, visiting and associated activities.

Music was provided by the "Tempos." Mrs. B. D. Howell, Mrs. John R. Dixon, Mrs. Ralph W. Bohnsack and Mrs. Robert W. Smith of Brookfield were responsible for the fine decorations and door prizes. Mrs. Albert D. Cross, Trenton, spoke briefly on behalf of the Auxiliary.

Dr. Donald Dowell, Chillicothe, presented the President's Plaque to Dr. Joseph Conrad of Chillicothe, retiring President.

Frank R. Daley, M.D., *Secretary*

SECOND DISTRICT

COUNCILOR
LYSLE M. BACH, HANNIBAL

Chariton-Macon-Monroe-Randolph County Medical Society

The regular meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held on Dec. 14, 1972 at Woodland Hospital Medical Library in Moberly. President F. L. Harms presided.

(*Left to right*) Dr. George Mandler and President Erroll W. Allen of Chillicothe welcome First District Councilor John N. Martin to the Grand River Medical Society's annual Christmas Party.—Dr. Albert D. Cross of Trenton.—As retiring President of the Society, Dr. Joseph Conrad, Chillicothe, accepts the President's Plaque from Dr. Donald Dowell, Chillicothe.

Dr. L. E. Huber arranged the program which was presented by Bartley R. Frueh, M.D., who is in the private practice of ophthalmology in Columbia and assistant professor of ophthalmology, University of Missouri Medical Center. Doctor Frueh discussed "The Management of Ocular Trauma" and "Plastic and Reconstructive Surgery" associated with the eye, lids and orbit. He illustrated his remarks with color slides showing many examples of injuries, congenital defects and tumors and the results after surgery. He also showed pictures of results he has obtained with plastic surgery performed for cosmetic reasons.

Members present were Drs. F. L. Harms, Chariton County; James E. Campbell and D. E. Eggleston, Macon County; F. A. Barnett, Monroe County; W. D. Chute, C. C. Cohrs, P. V. Dreyer, J. Will Fleming, T. S. Fleming, L. E. Huber, G. R. Hudson and Robert H. Young, Randolph County.

Guests were Dr. Frank Emmert, resident in ophthalmology at the University Medical Center in Columbia and Charles Fleming, son of Dr. J. Will Fleming, Jr.

W. D. Chute, M.D., *Secretary*

Seminar on Lifesaving Measures for the Critically Injured

On March 26-29, St. Louis will be the site of the first of 16 seminars on *Lifesaving Measures for the Critically Injured* sponsored by the Trauma Program of the American College of Surgeons. The St. Louis Seminar at the Chase-Park Plaza Hotel will be provided by the Department of Surgery, Washington University, under the directorship of Dr. Walter F. Ballinger, Professor and Chairman; Dr. Carl E. Lischer; and Dr. John Collins.

The curriculum content of the seminar will be designed particularly for rural and general practitioners and emergency department physicians, groups who are called upon to render primary medical care to the overwhelming majority of the seriously injured. The seminar also will be attractive as continuing education for surgeons, including those surgical specialists who treat life-threatening injuries. Specialists in internal medicine who often become involved in the care of the injured also are expected to be attracted by the broad curriculum.

Discussions of assessment of the critically injured and the causes of death soon after injury (airway and respiratory problems, hemorrhagic shock and brain damage) and their prompt treatment will take place at the beginning of the programs. Thereafter, injuries of the head, chest, abdomen and extremities, which are immediately or may become life or limb-endangering, and their management will be covered in detail. Finally, the programs will include life-threatening late complications of severe trauma, such as pulmonary insufficiency from non-thoracic trauma, impaired kidney function complicating patient management and complications following blood transfusions. Hyperalimentation, and intensive care of the trauma patient also will be included.

The Seminars are approved by the AMA for credit toward the Physicians' Recognition Award and by the American College of Emergency Physicians for Continuing Educational Requirements for its members.

Further information about the seminar and an advance registration form may be obtained on request from Trauma Division, American College of Surgeons, 55 East Erie St., Chicago, Ill. 60611, or from Dr. Carl Lischer, Department of Surgery, Washington University, 4960 Audubon Ave., St. Louis, Mo. 63110. The registration fee of $50 includes three lunches and a copy of the new manual of the ACS Committee on Trauma, "Early Care of the Injured Patient."

Eight additional seminars are scheduled for 1973 and seven more for 1974. Each group will be in cities dispersed across the United States. After the St. Louis seminar, the next in the midwest will be provided by Wayne State University in Detroit on May 9-12, 1973.

The seminars are supported by Contract Number NIH 72-4393, the U. S. Public Health Service, Department HEW.

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In fact, there are no known contraindications in recommended oral doses other than it should not be gi in the presence of frank arterial bleeding or immediate postpartum.

INDICATIONS: Based on a review of this drug by the National Academy of Sciences–National Research Council and/or other information, the FDA has classified the indications as follows:
Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's disease) and Raynaud's disease.
3. Threatened abortion.

Final classification of the less-than-effective indications requires further investigation.

COMPOSITION: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.

DOSAGE AND ADMINISTRATION: 10 to 20 mg. three or four times d.

CONTRAINDICATIONS AND CAUTIONS: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arteria bleeding.

ADVERSE REACTIONS: On rare occasions, oral administration of the has been associated in time with the occurrence of severe rash. When ra appears, the drug should be discontinued. Occasional overdosage effects such as transient palpitation or dizziness are usually controlled by reducing the dos

SUPPLIED:
Tablets, 10 mg.—bottles of 100, 1000, 5000 and Unit Dose
20 mg.—bottles of 100, 500 and Unit Dose

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Our skin—the human integument—covers us, defines us, protects us. But skin is subject to cuts, burns, abrasions. And infections. Neosporin Ointment fights infection by providing broad antibacterial action against susceptible skin invaders. It contains antibiotics that are rarely used systemically, reducing the risk of sensitization.

INDICATIONS: *Therapeutically*, used as an adjunct to appropriate systemic therapy for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

PRECAUTION: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Complete literature available on request from Professional Services Dept. PML.

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Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q.s. In tubes of 1 oz. and ½ oz. and 1/32 oz. (approx.) foil packets.

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ence and flexibility of dosage. Antivert/25
25 mg. meclizine HCl) Chewable Tablets
re available for the management of nausea,
omiting, and dizziness associated with mo-
ion sickness.

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12th-15th day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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New Members

Kenneth J. Arnold, M.D., 4989 Barnes Hospital Plaza, St. Louis has become a member of St. Louis Medical Society. Dr. Arnold is a native of Belleville, Ill., received his preliminary education at the University of Notre Dame and his M.D. degree at Washington University in 1968. He specializes in general surgery.

Wlliam Kirkland Bowman, M.D., 14 Doctor's Park, Cape Girardeau, has become a member of Cape Girardeau County Medical Society. Dr. Bowman is a native of Memphis, Tenn., received his preliminary education at the University of Tennessee and Memphis State University and his M.D. degree at the University of Tennessee in 1960. He specializes in internal medicine and cardiology.

Robert E. Burdge, M.D., 1310 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Burdge is a native of Boston, Mass., received his preliminary education at Stonehill College and his M.D. degree at St. Louis University in 1966. He specializes in orthopedic surgery.

Galileu Cabral, M.D., 3015 N. Ballas Rd., St. Louis, has become a member of St. Louis County Medical Society. Dr. Cabral is a native of Minas, Brazil, received his preliminary education at Colegio Cristo Redentor and his M.D. degree at the University of Juiz de Fora in 1964. He specializes in internal medicine.

Gabrielle A. Carlson, M.D., 7900 Natural Bridge, St. Louis, has become a member of St. Louis Medical Society. Dr. Carlson is a native of Newton, Mass., received her preliminary education at Wellesley College and her M.D. degree at Cornell University in 1968. She specializes in psychiatry.

Suresh Chand, M.D., 1420 Grattan, St. Louis, has become a member of St. Louis Medical Society. Dr. Chand is a native of Hyderabad, India, received his preliminary education at Nizam College and his M.D. degree at Osmania Medical College in 1963. He specializes in child psychiatry.

Ajit Kumar Choudhuri, M.D., 1420 Grattan, St. Louis, has become a member of St. Louis County Medical Society. Dr. Choudhuri is a native of Cuttack, India, received his preliminary education at St. Xavier's College and his M.D. degree at Milratan Sakuar Medical College in 1958. He specializes in psychiatry.

Forest H. Coulson, M.D., 19 Doctors Park, Cape Girardeau, has become a member of Cape Girardeau County Medical Society. Dr. Coulson is a native of Ottumwa, Ia., received his preliminary education at the University of Iowa and his M.D. degree at the University of Iowa in 1940. He specializes in internal medicine.

Rama G. Eachempati, M.D., 1515 Lafayette, St. Louis, has become a member of St. Louis Medical Society. Dr. Eachempati is a native of India, received his preliminary education at Guntur, A-P. India and his M.D. degree at Andhra Medical College in 1957. He specializes in internal medicine, nuclear medicine, endocrinology.

Donald E. Edwards, M.D., 937 Broadway, Cape Girardeau, has become a member of Cape Girardeau County Medical Society. Dr. Edwards is a native of Aledo, Ill., received his preliminary education at the University of Illinois and his M.D. degree at St. Louis University in 1962. He specializes in internal medicine.

Bang Orn Giraparnont, M.D., 601 S. Brentwood, Clayton, has become a member of St. Louis Medical Society. Dr. Giraparnont is a native of Thailand, received his preliminary education at Chulalonghorn Pre-Medical School and his M.D. degree at Chulalonghorn Hospital Medical School in 1966. He specializes in obstetrics-gynecology.

Mary Louise Gray, M.D., 1325 S. Grand, St. Louis, has become a member of St. Louis Med-

Welcome, New Members!

March 29-April 1,
1973

MSMA 115TH ANNUAL SESSION

Chase-Park Plaza Hotel
St. Louis

ical Society. Dr. Gray is a native of Wilkes-Barre, Penn., received her preliminary education at Barnard College and her M.D. degree at State University of New York in 1952. She specializes in obstetrics-gynecology.

Roger L. Greenlaw, M.D., 307 E. Jefferson, Clinton, has become a member of Henry County Medical Society. Dr. Greenlaw is a native of Indianola, Ia., received his preliminary education at the University of Missouri-Columbia and his M.D. degree at the University of Missouri in 1970. He specializes in family practice.

John G. Gregory, M.D., 1325 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Gregory is a native of Philadelphia, Pa., received his preliminary education at St. Andrew's School and his M.D. degree at Columbia University in 1965. He specializes in urology.

Duncan A. Killen, M.D., 510 Medical Plaza, 4320 Wornall Rd., Kansas City, has become a member of Jackson County Medical Society. Dr. Killen is a native of Green Hill, Ala., received his preliminary education at Vanderbilt University and his M.D. degree at Vanderbilt University in 1955. He specializes in thoracic surgery.

Virginia L. Larsen, M.D., 5800 Arsenal, St. Louis, has become a member of St. Louis Medical Society. Dr. Larsen is a native of Chungking, China, received her preliminary education at the University of Washington and her M.D. degree at Women's Medical College of Pennsylvania in 1939. She specializes in medical administration.

Thomas B. McKeel, M.D., 180 Doctors Building East, Kansas City, has become a member of Jackson County Medical Society. Dr. McKeel is a native of Pine Bluff, Ark., received his preliminary education at Fisk University and his M.D. degree at the University of Arkansas in 1969. He specializes in internal medicine.

Alexander G. Mallouk, M.D., Wornall Rd. at 44th, Kansas City, has become a member of Jackson County Medical Society. Dr. Mallouk is a native of Cairo, Egypt, received his preliminary education at Cairo University and his M.D. degree at Cairo University in 1960. He specializes in internal medicine.

C. Douglas Meadows, M.D., 777 S. New Ballas Rd., St. Louis, has become a member of St. Louis County Medical Society. Dr. Meadows is a native of Shelby, Mont., received his preliminary education at Beloit College and his M.D. degree at Northwestern University in 1965. He specializes in industrial medicine.

R. William Morris, M.D., 6420 Clayton Rd., St. Louis, has become a member of St. Louis Medical Society. Dr. Morris is a native of St. Louis, received his preliminary education at Harvard College and his M.D. degree at St. Louis University in 1972. He specializes in internal medicine.

Pichat Pojanasomboon, M.D., 1318 Truman, Rolla, has become a member of St. Louis Medical Society. Dr. Pojanasomboon is a native of Bangkok, Thailand, received his preliminary education at Suankularb School and his M.D. degree at the Faculty of Medical Science, Bangkok in 1966. He specializes in ophthalmology.

Carl F. Ritter, M.D., 937 Broadway, Cape Girardeau, has become a member of Cape Girardeau County Medical Society. Dr. Ritter is a native of Cape Girardeau, received his preliminary education at Washington University and his M.D. degree at Washington University in 1966. He specializes in general radiology.

Hugh John Roddy, M.D., 601 S. Brentwood, St. Louis, has become a member of St. Louis County Medical Society. Dr. Roddy is a native of St. Louis, received his preliminary education at Washington University and his M.D. degree at the University of Missouri in 1971. He specializes in general practice.

Daniel L. Schlozman, M.D., 7301 Mission Rd., Shawnee Mission, Kan., has become a member of Jackson County Medical Society. Dr. Schlozman is a native of Kansas City, received his preliminary education at the University of Michigan and his M.D. degree at the University of Kansas in 1964. He specializes in internal medicine (pulmonary diseases).

(Continued on page 120)

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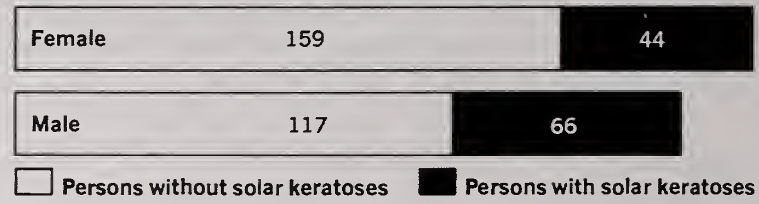
What it means to live and work i Tipton County, Tennessee

Persons who are white and over 40 have one chance in four of having solar keratoses... which may be premalignant

An epidemiologic study* conducted in Tipton County, Tennessee, revealed that 28.5% of white persons over 40 had solar keratoses; most had multiple lesions. Cluster sampling projected an estimated prevalence of 32.5% for white males and 19.5% for white females.

Though this is an unusually high percentage of affected persons, these lesions can occur in any white population, wherever people work or play out of doors.

Prevalence of solar keratoses in white persons over 40 in Tipton County, Tennessee



*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.

olar, actinic, senile keratoses

ılled by many names, the typical lesion is flat slightly elevated, brownish or reddish in lor, papular, dry, adherent, rough, sharply fined; usually multiple lesions, chiefly on posed portions of the skin.

equence/selectivity of response

ythema in areas of lesions may begin after veral days of therapy; height of reaction nly in affected areas)* usually occurs within o weeks, declining after discontinuation of erapy. Since this response is so predictable, sions that do not respond should be biopsied rule out the presence of a frank neoplasm.

osmetic results

osmetic results are highly favorable. Incince of scarring is low—important with multie facial lesions. Efudex should be applied ith care near the eyes, nose and mouth.

% cream–a Roche exclusive

nly Roche formulates the 5% cream... gh in patient acceptability... high in clinical ficacy, especially for lesions of hands and rearms... economical.

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Multiple actinic or solar keratoses.
Contraindications: Patients with known hypersensitivity to any of its components.
Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.
Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.
Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.
How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.
Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

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cream/solution

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Nutley, N.J. 07110

Warren G. Sherman, M.D., 309 Manchester Rd., Manchester, has become a member of St. Louis County Medical Society. Dr. Sherman is a native of St. Louis, received his preliminary education at the University of Missouri and his M.D. degree at Tulane University in 1969. He specializes in pediatrics.

Paul A. Spence, M.D., 24N Sprigg, Cape Girardeau, has become a member of Cape Girardeau County Medical Society. Dr. Spence is a native of Cairo, Ill., received his preliminary education at Quincy College and his M.D. degree at St. Louis University in 1966. He specializes in general practice.

Herminia D. Vijungco, M.D., 215 S. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Vijungco is a native of Philippines, received her preliminary education at University of St. Tomas and her M.D. degree at University of St. Tomas in 1965. She specializes in anesthesiology.

Elizabeth N. Villamar, M.D., 7764 Chalmette, Hazelwood, has become a member of St. Louis Medical Society. Dr. Villamar is a native of Philippines, received her preliminary education at Corregidor College and her M.D. degree at the University of St. Tomas in 1965. She specializes in obstetrics-gynecology.

John R. Wagner, M.D. 5505 Delmar, St. Louis, has become a member of St. Louis Medical Society. Dr. Wagner is a native of Oshkosh, Wis., received his preliminary education at Marquette University and his M.D. degree at Marquette University in 1964. He specializes in orthopedic surgery.

Gus S. Wetzel, M.D., 305 E. Wilson, Clinton, has become a member of Henry County Medical Society. Dr. Wetzel is a native of Clinton, received his preliminary education at Westminster College and his M.D. degree at Tulane Medical School in 1967. He specializes in general surgery.

Susan L. Wilson, M.D., 4989 Barnes Hospital, St. Louis, has become a member of St. Louis Medical Society. Dr. Wilson is a native of Chicago, received her preliminary education at Washington University and her M.D. degree at the University of Louisville in 1972. She specializes in anesthesiology.

Carroll L. Zahorsky, M.D., 230 Penn Park Medical Center, Kansas City, has become a member of Jackson County Medical Society. Dr. Zahorsky is a native of Oklahoma, received his preliminary education at Northwestern State University and his M.D. degree at the University of Oklahoma in 1965. He specializes in plastic surgery.

Correction

Robert J. Stanley, M.D., 510 S. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Stanley is a native of Elizabeth, N. J., received his preliminary education at St. Peter's College and his M.D. degree at St. Louis University in 1963. He specializes in radiology. (In the December, 1972 issue of Missouri Medicine, Doctor Stanley's specialty was incorrectly listed as general surgery.)

Continuing Education Coming Events

Feb. 16-17	**Symposium on Management of The Burn Patient** Dept. of Plastic and Reconstructive Surgery and St. Louis Committee on Trauma of the American College of Surgeons Chase Park Plaza Hotel, St. Louis
Feb. 23-24	**Missouri Regional Meeting** American College of Physicians Ramada Inn, St. Louis
March 12-14	**Symposium: Pediatrics** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan. 66103
March 26-28	**Symposium: Surgery** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan. 66103

The Council Reports

(Continued from page 80)

MSMA Staff did an outstanding job and the program was well organized. He recommended that the MSMA continue to sponsor such tours.

District #7—Dr. Chandler reported that Jackson County will hold its President's Dinner on Friday, January 19 and invited all those present to attend.

Dr. Chandler stated that in reference to the program to be aired by NBC on "What Price Health?," the Executive Secretary of Jackson County has been in contact with the station that carries the NBC network to determine whether or not the officers of the Society can call a preview of this program. If this is possible, further inquiry will be made as to whether we can give a backup program to answer this. He suggested that other societies might attempt this and indicated that physicians cannot always sit back and be attacked.

Dr. Chandler said that there is an increasing interest in autonomous blood transfusions in Kansas City. A Committee on Blood has been expanded and Dr. Chandler indicated that he would like to report back to the Council on this subject so that perhaps, it can be placed in one of the committees on the state level.

Dr. Chandler stated that they are having difficulties with the Mid-American CHP Agency, particularly as physician representation on the board is concerned. Heretofore, they have had input from the Jackson County Medical Society. This has been changed, but they do not know how or why. There is no M.D. input from the County Society at the present time. The physician now on the board comes back and tries to give a logical explanation of their activities, but he is overwhelmed by so much paperwork. It is difficult to know exactly what is going on.

He said that the Western Missouri Health Education Center, which was reported by Dr. Noback at the last Council Meeting as receiving funding, is gaining momentum. This will be an increasingly important area in the future.

He had spoken previously about the HMO which is to be in Kansas City. The man who contacted Jackson County Medical Society regarding the HMO is now in full residence. He has contacted the unions, large industries, etc. and is getting some interested audiences, so we feel that there will be, in fact, an HMO of some type in Kansas City in the near future.

District #8—Dr. McAlhany reported that Dr. Hoffman, President of AMA, was given an honorary degree from Drury College during his visit in Springfield in November. Dr. McAlhany thanked the officers and councilors who were able to spend time with Dr. Hoffman. He stated that he was very impressed with him.

Greene County did elect a physician as coroner as was anticipated and plans are underway to establish a medical examiner system in Greene County. Clay County has agreed with this concept and a bill will be introduced in the Missouri Legislature. Senators Paul Bradshaw and William Waters are co-sponsoring this bill.

Dr. McAlhany said that there has been advertising by chiropractors in the local newspaper. He was advised first to go through the State Chiropractic Board to see if this group would take action to stop this advertising and then, if necessary, to approach the local Prosecuting Attorney. It was suggested that as the Eighth District Councilor, Dr. McAlhany write a letter to the Chiropractic Board filing a complaint and send a copy of the letter with a copy of the article to the MSMA office and to the local Prosecuting Attorney. A Councilor, a physician or an individual could file a complaint with the Chiropractic Board. Dr. McAlhany will pursue this matter and will report further to the Council.

Dr. McAlhany called on Mr. Schnedler who commented on the Doctor-for-a-Day Program. This project is being undertaken by the Missouri Academy of Family Physicians. The Academy would provide a physician each day the Legislature is in session. It is hoped this will aid in communications between the medical profession and the Legislature.

He also stated that they had won the case with IRS regarding the Greene County Medical Society Foundation. However, the judgment was appealed. It is still in litigation and the Foundation's attorneys have now filed the report and their answer to the appeal. Hopefully, some decision will be made in the near future.

The Greene County Medical Society Business Bureau has now been incorporated and the Board of Directors has been appointed. The Bureau hopes to be in business by Jan. 1, 1973.

After about six months of research, Greene County Medical Society has produced a reference handbook for physicians. A copy was sent to all physicians in Greene County.

District #3—Dr. Franklin stated that he also attended the meeting in Greene County during Dr. Hoffman's visit. He said that functions were well attended, the food was delicious and "Greene County is really on the ball."

At the invitation of Dr. Hetlage, he attended the meeting of the Fourth District. There were other meetings that night, so it was not as well attended as it might have been. At that meeting, he made a suggestion to Dr. Hetlage and the group similar to Dr. Cope's suggestion, that their suggestions be put into the form of resolutions and presented to the House of Delegates.

The installation of Dr. Donald Judd as President of the St. Louis Medical Society will be held on Saturday, January 13 and all are invited. Dr. Richard Bradley is President-Elect, Dr. Joseph Vacca is Vice-President and Dr. Carol Williams is Secretary.

Dr. Franklin indicated that the yellow pages of the phone book in St. Louis are beginning to list doctors under specialties. He asked for comments about this.

Mr. Allen Smith reported that Jackson County started this specialty listing under the AMA trademark years ago. About 12 years ago, the plan was expanded to include three other medical societies in the Kansas City area—Wyandotte, Johnson and Clay Counties.

Dr. Franklin indicated he did not feel this helped the patients, who have always been able to call the St. Louis Medical Society and this has worked very well.

District #2—Dr. Bach—No report.

District #1—Dr. Martin reported that Sister's Hospital in St. Joseph had recently announced that it will close. He indicated that this would mean a loss of 200 beds. Dr. Martin also indicated that Sister's Hospital recently had taken over the ambulance service for St. Joseph. He stated that another hospital in St. Joseph had recently hired a physician for its emergency room.

Dr. Martin indicated that it has been difficult to get new doctors in his area. He stated that he was questioned by some city councilmen as to why they don't get new doctors.

Dr. Martin said that they had coroners in his area who are M.D.'s and that he is willing to help those in other areas if they wish to get M.D. Coroners.

District #6—Dr. Bradshaw indicated that in the absence of Dr. Domke, he would report on the Division of Health. One recent concern was whether or not smallpox vaccination should be continued. The U. S. Public Health Service has gone on record as favoring the discontinuance of required vaccination. The Division of Health had appointed a committee to study this and that committee reported that smallpox vaccination need not be continued. Dr. Bradshaw stated that the Board of Health thinks that it should be continued, but he indicated that the Board would abide by the committee's statement. He also indicated that we were going to be faced with the A-2 English strain of influenza.

Dr. Bradshaw referred to a point mentioned by Dr. Hetlage regarding labeling of prescriptions. In his area, the prescription blanks were printed so that a physician could indicate whether a prescription should be labeled.

Dr. Bradshaw had the privilege of attending the Fall Conference of the MSMA Woman's Auxiliary in Columbia. The two topics presented were legislative and health education. The program was well done and he felt that Mrs. Jones is to be congratulated.

Dr. Bradshaw requested that an ad hoc committee of not only Council members but, also, of those attending the Council meetings be appointed to study the feasibility of inserting a year of continuing training, either after internship or in lieu of internship, in primary patient care in the state of Missouri. This is being studied in several other states.

Dr. Gunn asked whether or not this would include emergency room service. Dr. Bradshaw indicated that he wasn't sure at this point about emergency room service and would rather not go into detail at this time.

It was moved that an ad hoc committee of the Council plus those normally attending the Council meetings be appointed to study the feasibility of inserting a year of continuing training in primary patient care in the state of Missouri. The motion was seconded and carried. Dr. Cope stated that the committee would be appointed on Sunday morning.

Dr. Bradshaw reported that the PTA, in conjunction with the Missouri Department of Education, is planning workshops over the state. The basic premise of these workshops is the study of communicable diseases with emphasis on venereal disease, but the program is not geared entirely to VD control, but also to the development of curriculum from kindergarten through high school and college for health education and communicable diseases.

District #5—Dr. Cope stated that his Councilor District meeting was held in conjunction with the Fall Conference of the Woman's Auxiliary in Columbia and that it had been very successful.

REPORTS OF AMA DELEGATES

Dr. Washburn stated that in the absence of Dr. Neilson, he would give the AMA Delegates' report. The 1972 Clinical session of the AMA was held in Cincinnati on Nov. 26-29, 1972. Approximately 50 reports and 70 resolutions were considered. A hearing of the Council on Long Range Planning and Development was held on November 27 and the Council on Medical Service held a conference on Saturday afternoon, November 25, on the subject of PSRO's (Professional Standards Review Organizations). This problem dominated the meeting. President Nixon, by signing HR 1, made sweeping changes in Social Security, Medicare and Medicaid. The price tag is $6 billion and tax increases are to be imposed. The bill (1) extends Medicare to some people under 65 and brings the disabled into the program; (2) it federalizes aid to the aged, blind and disabled with a guaranteed income program; (3) it increases several Social Security benefits, such as raising widows benefits, and it lifts the amount retirees can earn and retain benefits. Nearly 100 changes are made in Medicare, Medicaid and Maternal and Child Health areas of the law and authorizes payment under Medicare to prepaid group practices termed HMO's.

However, the most significant change in the law for practicing physicians in our nation is the creation of a nationwide system of Professional Standards Review Organizations to police the cost and quality of health care for Medicare and Medicaid. However, extending this principle to the entire population a section at a time is entirely possible. The principle of government control of the practice of medicine through imposition of government-developed standards of diagnosis and treatment has already been established by the enactment of this legislation to create a network of PSRO organizations. It seems that justification for coercing M.D.'s into conforming to federal standards in their practices is that the government has "the right" to control anything it subsidizes.

The AMA Board of Trustees apparently is trying to sell HEW officials on the idea of letting physicians lead the way in the development of guidelines and criteria to be used in PSRO activities.

Dr. Washburn reported that the AMA Council and Committee structure has been drastically altered to save $840,000. Report A, presented by the Board of Trustees, is a sweeping change. It is labeled, "Fiscal Restraint and Priorities." It abolishes four councils and six committees, combines two other councils, reduces membership on the remaining councils and committees, cuts down on frequency of their meetings and trims 15 employees from the headquarters staff.

An AMA Conference on 1973 Membership Program was held on November 27. Membership in the AMA as of October, 1972, stands at 155,074—about 1,000 less than the 1971 total. It is expected that membership will probably equal the 1971 figure by the end of this year. Membership is still far below the 165,000 figure of 1970. Twenty-one states have equalled or bettered their 1971 membership totals. Missouri has reached 98% of its 1971 total. The AMA is issuing "guidelines for a 1973 Membership Drive," which, hopefully, will help component societies bolster local and state society and AMA membership.

The AMA delegates discussed various resolutions and reports presented at the 1972 Clinical Session, which include the following: A resolution encouraging unified membership; Resolution #33 which calls for liaison between state medical associations and federal representatives and agencies; Resolution #1 which calls for physician representation on governing boards of hospitals; Resolution #23 which calls for the development of improved communications between medical staffs and state and local medical societies; Report F of the Board of Trustees regarding the responsibility for actions of the physician's assistant; Report H of the Board of Trustees regarding recommended definition of the role of a primary care physician; Report B of the Council on Medical Service regarding public involvement in health services review; Resolution #24—Review Committees for Medical Practices; Report J of the Council on Medical Service regarding the claims practices of Aetna Life and Casualty Company.

Dr. Benoit stated that he had been asked to discuss the PSRO legislation recently adopted by Congress. Dr. Benoit indicated that a Conference was held during the AMA Clinical Session to discuss PSRO. He indicated that the AMA is going to appoint an advisory committee on PSRO to act as the medical profession's advocate to insure the proper implementation of this program in order to assure the best interests of the public and the profession. This committee will include members from the Board of Trustees, the Council on Medical Service and representatives from other appropriate organizations. The Committee was given several responsibilities which include some of the following:

(1) Provide input from the medical profession into the development of the rules and regulations which will govern the Professional Standards Review Organizations program; (2) Assist state medical associations, or state medical associations in concert with county medical societies, in developing PSRO's and to recommend structures and operating mechanisms; (3) Recognize appropriate geographical boundaries for PSRO's; (4) Distribute information about Public Law 92-603. Dr. Benoit stated that this information needs to be circularized to every member of our Association. He indicated that doctors need to know what is in the law. This Committee and other AMA councils and committees will monitor the effect of PSRO activity on the quality of medical care and report their findings to each future meeting of the House of Delegates.

Dr. Benoit stated that we in Missouri have recognized that we were going down the road toward legislation of this type and that is why we started the Health Care Foundation. He indicated that the HCF is structured along lines that, hopefully, would make it the PSRO for Missouri and, thereby, maintain as much control as possible over our own destiny and over the destiny of the care of patients. Dr. Benoit indicated that the law states there will be no liability to persons serving in a peer review capacity for actions they take unless there is proven malice.

Dr. Benoit then asked if there were any questions. Dr. Bradshaw asked if there would be lay input into the PSRO. Dr. Benoit indicated that as far as judgment of the competency of professional care is concerned, there is no one who can do this appropriately except physicians; but when you are talking about review of health care services, there is other expertise that can be brought to bear on this problem. He indicated that some of these people will be hospital administrators, legislators, legal and business people. Dr. Benoit indicated that the funding of this program has been written into the law. He stated that this legislation should be summarized and published in the Journal.

It was moved that staff publish a summarization of PSRO legislation in a future issue of Missouri Medicine. The motion was seconded and carried.

Dr. Washburn thanked the Alternate Delegates, Dr. and Mrs. Gunn, Dr. and Mrs. Stricker, Dr. and Mrs. Cope and staff for their assistance at the AMA meeting.

HEALTH CARE FOUNDATION REPORT

Dr. Benoit stated that a Board meeting had been held the evening before the Council Meeting. He indicated that the Foundation is proceeding with efforts to obtain financial support from RMP. Dr. Benoit reported that the Foundation had solicited the participating members for support and that they had a reasonably good response. To date, they have received $12,110 from the participating members. He indicated that the Missouri Radiological Society had been extremely active and interested in the Foundation. The Society had held a meeting in Kansas City regarding its role as it relates to peer review and had sent a check to the Foundation.

Dr. Benoit reported that he had recently met with the medical directors of several large companies in Kansas City and the Foundation has agreed to assist them with their problems. One of the companies made a financial contribution to the Foundation recently and Dr. Benoit stated that he feels that the Foundation will obtain similar contributions from the other companies.

Dr. Benoit stated that he would like to commend Mark Halvorson for the fine job he is doing.

Dr. Benoit indicated that the Council had appointed a committee to act as consultants to the Bylaws Committee of the Foundation. However, since the passage of the PSRO legislation, the committee had regrouped. He stated that the Board had spent time discussing how to approach bylaw changes in order to accommodate the Foundation to HR 1. He indicated that one of the main changes would be the manner in which men are elected or appointed to committees. He stated that it was important that these changes be made as soon as possible so that the Foundation might be considered by HEW as the PSRO for Missouri.

Dr. Benoit stated that they had 60% participation from the members of the Association, but would like to have 80%. He indicated that further solicitations will be made.

AD HOC COMMITTEE ON THIRD PARTY PAYMENTS

Dr. Peterson reported that the Committee had met with representatives of carriers and had discussed mutual problems with them. Dr. Peterson mentioned a letter that Aetna is sending to patients and said that at the January meeting of the Commission on Medical Economics, Aetna officials will be present to discuss this and other claims policies.

The Committee presented the following recommendations for consideration by the Council:

1. That standard HIC forms be used to file insurance claims and that this form will have provision for designating any disability and if the carrier requires special forms to be filed, the physician should charge the carrier $5.00 for the preparation of each required form and further that all carriers be so advised.
2. That representatives of carriers present request the Health Insurance Council, in cooperation with the AMA Council on Medical Service, to design simplified, one-sided forms that will enable physicians to retain a copy for their files. This form should also provide a blank for the stamp of the physician's name and ID number.
3. That all carriers adopt the AMA-CPT Third Edition Code.

Dr. Miller moved that this report be accepted and that the recommended actions in the report be taken. Motion was seconded and carried.

AD HOC COMMITTEE ON NEGOTIATION OF PROFESSIONAL FEES

Dr. Peterson distributed copies of proposed bylaws for a negotiation of professional fees organization that the committee is presently trying to organize.

Motion was made and seconded that action on these proposed bylaws be tabled. Motion carried.

Dr. Peterson introduced Mr. Max Lilley, an attorney from Springfield, who had drawn up the proposed bylaws.

REPORT OF THE COMMITTEE ON EMERGENCY MEDICAL CARE

Dr. Klippel stated that a Task Force on emergency Medical Care under CHP had been appointed by Governor Hearnes. The Task Force spent a great deal of time going over this problem and has developed an emergency care services plan for Missouri. He indicated that the Governor's Advisory Council on CHP had approved this program. He stated that every hospital and physician has a role to play in emergency medical care. He indicated that the Governor's Advisory Council on CHP will try to generate support for legislation to implement this program.

Dr. Klippel then spoke briefly about the high cost of using helicopters as ambulances. He asked the Council to pass a resolution endorsing the idea of the development of a program for emergency care in the state.

Dr. McAlhany indicated that he would like to have material to read and study before taking any action on this. Dr. Klippel stated that he was not asking for the endorsement of a specific program, but only of the idea of establishing such a program. It was brought out that a bill had been introduced in the legislature last session regarding ambulances and ambulance personnel, but was not passed. Dr. McAlhany asked what would happen to the small community who could not meet the requirements of this program. Dr. Klippel stated that the idea is to have something down on paper and have money available to implement the program so that the small community that desires these services can avail itself of them.

Dr. Hetlage moved that the Council of the MSMA approve in principle the efforts of the Committee on Emergency Medical Service and encourage further development of a coordinated program for these services in Missouri and, also, provide for the regionalization of ambulances. Motion was seconded and carried.

REPORT OF THE WOMAN'S AUXILIARY

Mrs. Jones thanked the Council and the committee of the Council that helped the Auxiliary with its Fall Conference. She reported that there were 30 state representatives present and the total attendance was between 150 and 200. She stated that the Missouri Auxiliary is the first to have a Health Education Day and that this Auxiliary Health Education Day will be used as a pilot program for the other 49 state auxiliaries.

Mrs. Jones stated that Dr. Richard Bowles had asked the Auxiliary to support the Public Affairs Conference. She indicated that the Auxiliary will support it by attending the Conference and, also, that it would hold a mid-winter Board meeting preceding the Conference. She reported that the Woman's Auxiliary has 91 MMPAC members and that she hoped to have 100 by the end of the year.

Mrs. Jones reported that this year, the Auxiliary has raised $1,000 for the Missouri State Medical Foundation. She said that the county auxiliary with the largest per capita contribution to the Foundation will receive a plaque with that county auxiliary's name inscribed upon it.

Mrs. Jones stated that it was her pleasure to attend the Councilor District meetings and she is interested in attending those in which county auxiliaries have not been organized.

Mrs. Jones requested permission for herself or a representative appointed by her to attend the MSMA Commission and Committee meetings. She indicated that this is a common practice in surrounding states.

The above request was discussed, and it was the general feeling that this matter should be discussed further by the Auxiliary.

REPORT OF THE AD HOC COMMITTEE ON CONTINUING MEDICAL EDUCATION

Dr. Paul Young reported that the AMA Third National Conference of State Medical Association Representatives on Continuing Medical Education was held in October. The main subjects covered during this Conference were (1) Accreditation CME, (2) Curriculum for continuing medical education, (3) Peer Review and (4) Choice between voluntary or compulsory CME. He indicated that the AMA wants to delegate to state chapters the responsibility for CME accreditation. Dr. Young reported that curriculum for CME was discussed a great deal. He indicated that he would like to have some input from the new UMKC School of Medicine in regard to curriculum.

Dr. Young reported that in regard to peer review, Missouri has moved on the road farther than most other states. Our plan in Phase 2 considers it an important approach to have our continuing education program linked to peer review.

Dr. Young stated that various things had been tried in some states in regard to the choice between voluntary or compulsory continuing medical education.

Dr. Young reported that a workshop for members of his ad hoc committee, as well as representatives from the Councilor Districts, is being planned for February 2-3 and will be held in conjunction with the Public Affairs Conference. He asked for Council approval to proceed with this. The subject of a budget for this workshop was mentioned and Dr. Young said that a maximum budget of $500 or less should be sufficient.

Discussion followed on some of the points mentioned by Dr. Young. He suggested to the Council that a long look be taken at ways in which to develop an effective continuing medical education program and that he be given permission to proceed to develop a long range budget for a continuing education program. He indicated that in California, each member was assessed $10 a year for this program. He stated that changes in the budget of the State Medical Association might need to be made.

Motion was made to instruct Dr. Young to proceed with a workshop in conjunction with the Public Affairs Conference. Motion was seconded and carried.

Motion was made and seconded that Dr. Young be given permission to develop for consideration a long range budget for a continuing education program. Motion carried.

Dr. Young reported that the Committee had discussed acupuncture. He indicated that the committee discussed the MSMA news release and the similar policy statement of the State Board of Registration for the Healing Arts to the effect that acupuncture is the practice of medicine. It was noted that the AMA and the Federal Government are conducting research on acupuncture.

Dr. Young read the following statement regarding acupuncture developed by the Committee:

"The application of acupuncture as a modality to relieve human suffering is clearly an issue which physicians in the state of Missouri, the nation and the world must recognize. It would appear that where it is now being used, it is used on a purely empirical basis.

However, if we ascribe to the principles of allopathy, then we must consider its possible benefits to our patients.

"As with any empirical modality of treatment, great caution must be exercised in its use. Therefore, we recommend that acupuncture be considered as an experimental technique. Those physicians who wish to conduct experiments involving acupuncture should be guided by the same ethical and scientific principles which are applied to all experimentation in medicine. It is recommended that experimentation be carried out under the direct supervision of professionals who are well-trained in the basic sciences upon which the modern practice of medicine is based. It is recommended that physicians approach the issue of acupuncture with the same sense of critical inquiry which has characterized the medical profession since Hippocrates."

The motion was made and seconded to accept the statement on acupuncture. During discussion, the following amendment to the statement was presented:

> ". . . that anyone doing acupuncture confer with the AMA Section on Anesthesia for their experimental protocol and to follow this protocol and report their results."

Motion was made by Dr. Hetlage and seconded to table action on this statement and proposed amendment. Motion carried.

The next portion of Dr. Young's report was concerned with the employment of medical students in physicians' offices for the summer months. The Committee presented the following two points in regard to this subject: (1) Suggest to the MSMA Council that Dr. Young be authorized to represent MSMA in negotiations with the other three sponsors of the SAMA Summer MECO Program and (2) the same four sponsors would then assume the responsibility for possible implementation of the program in the summer of 1974. Dr. Young also indicated that guidelines to implement this program would be set up.

Motion was made and seconded to give Dr. Young the authority to represent MSMA in the implementation of this program. Motion carried.

Dr. Young next reported on EKG computer interpretation. He stated that the members of the committee felt that they did not have the appropriate expertise to deal with this problem and, therefore, recommended that a study group be formed including a cardiologist, a general physician and two or more internists and, also, include Dr. Ben McAllister and Dr. Russell Sandberg. Dr. Cope stated that it was his opinion that if Dr. Young wished to appoint a subcommittee to study this problem he would be perfectly in order.

The last item in Dr. Young's report was a letter from Dr. Maxwell Berry requesting CME core curriculum. Dr. Young pointed out that this letter had been directed to the Council for action.

Motion was made and seconded to refer this letter to the Ad Hoc Committee on Continuing Medical Education. Motion carried.

Dr. Franklin moved that Dr. Young's report be accepted. Motion was seconded and carried.

REPORT OF INSURANCE ADVISORY STUDY COMMITTEE

Mr. Fox reported that the Council had directed the formation of this committee and that a meeting had been held recently. He stated that representatives from insurance companies were invited to the meeting. After discussion, they recommended that the three MSMA existing programs (disability, major medical and accidental death and dismemberment) be continued as they are now written. Mr. Fox indicated that the committee had studied some new programs (term life, overhead, excess major medical). The committee recommended that these programs be studied further. It was pointed out that the AMA and the large metropolitan medical societies have their own insurance programs.

Dr. Hansbrough moved acceptance of this report. Motion was seconded and carried.

Dr. McAlhany suggested that, possibly, this committee could investigate some type of deductible insurance program. Dr. Bradshaw pointed out that the law regarding Workmen's Compensation had recently been changed so that anyone who has one or more employees will come under this program. He stated that this is a real hardship on those who employ professional people. It was suggested that this committee investigate insurance coverage under various insurance companies.

Motion was made to look into other health coverage plans other than the Blues and consider statewide coverage for MSMA membership. Motion was seconded and carried.

Dr. Cope referred this resolution to the Advisory Study Committee for report.

Dr. Bradshaw suggested that the staff find out what they can about the new Workmen's Compensation Law and report back to the Council. Dr. Cope directed that staff check into this and report back to the Council.

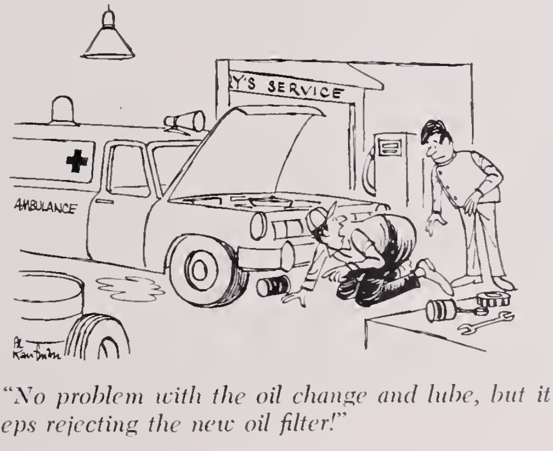
Dr. Thoma stated that St. Louis University comes under this program. Dr. Thoma indicated that St. Louis University is self-insured. He was directed to bring report on this to the next meeting.

REPORT OF COMMISSION ON MEDICAL-LEGAL AFFAIRS

Mr. Cooper reported that a summary of an excellent film, "Courtroom Confrontation," was shown at a recent meeting. The film is based on the landmark "Darling Case."

There was discussion at a recent meeting of this committee regarding video tape depositions. The Bar Association is going to attempt to have court rules changed to allow video tape depositions in court. It was pointed out that it depended upon the judge as to whether or not these types of depositions would be admitted as evidence.

The Committee suggested that the use of pre-trial screening panels for professional liability suits should be restudied. The Medical Association had studied this in 1970. At that time, it recommended that pre-trial screening panels not be used. A member of each organization



"No problem with the oil change and lube, but it keeps rejecting the new oil filter!"

represented at the joint medical-legal meetings will be appointed to serve on an ad hoc committee to study pre-trial screening panels.

Mr. Cooper stated that at the committee meeting it was brought out that the Buchanan County Bar Association had declined to accept the "Interprofessional Code." Since that time, however, they have changed their stand and accepted the Code.

Mr. Cooper reported that the medical examiner system was discussed and the committee agreed to continue the joint meetings.

Motion was made and seconded to accept this report. Motion carried.

REPORT ON CARIBBEAN TOUR SPONSORED BY MSMA

Mr. Cooper reported that the cruise had been excellent and that the scientific program was very good. He read several letters commending the Association for the cruise and the scientific program.

Dr. Hansbrough moved that this report be accepted with commendation.

Motion was seconded and carried.

PROVOST FOR HEALTH AFFAIRS

Dr. Bradshaw reported that the committee (Drs. Bradshaw, Chandler and Gulick) appointed by Dr. Cope to suggest a recommendation for the position of Provost for Health Affairs would like to make the following motion:

"It is the unanimous opinion of the Committee that in recognition of the service Dr. William D. Mayer has given to the State Medical Association while acting as Dean of the University of Missouri School of Medicine-Columbia, that the Council endorse Dr. Mayer as a candidate for the office of Provost for Health Affairs of the University of Missouri." Motion was duly seconded and carried.

PUBLIC AFFAIRS CONFERENCE

Mr. Swarens reported that the Public Affairs Conference will be held on Feb. 3-4, 1973 at the Ramada Inn in Jefferson City. The Woman's Auxiliary will hold its Board Meeting in conjunction with this Conference. All invited speakers have agreed to appear. Among the speakers will be Sen. Lem T. Jones, Jr., Rep. Richard J. Rabbitt and two AMA officials—one from Washington and one from Chicago. The Commission on Public Affairs would like to ask each Councilor to contact his county society officers and urge them to attend the Public Affairs Conference. Motion was made, seconded and carried to file this report as information.

COMMISSION ON PUBLIC AFFAIRS

Mr. Swarens reported that upon request from the Council, the Commission on Public Affairs investigated the use of mobile X-ray units for chest screening in Missouri. He stated that at the time of the Council request, the Tuberculosis and Respiratory Disease Society of St. Louis and Eastern Missouri was operating under guidelines which permitted mass X-ray screening. However, the Society has recently revised its guidelines to conform with policy statements of HEW, The American College of Radiology and the USPHS, which urge caution concerning the use of photofluorographic X-ray units for chest screening programs. The Society has discontinued mass screening, but will continue to offer its services to problem situations.

The Commission on Public Affairs endorses the new guidelines for mobile X-ray units as issued by the Tuberculosis and Respiratory Diseases Society of St. Louis and Eastern Missouri. Motion was made, seconded and carried to accept the interim report of the Commission on Public Affairs and endorse the guidelines regarding Mobile X-Ray Units as set forth by the Tuberculosis and Respiratory Disease Society of St. Louis and Eastern Missouri.

BOARD OF REGISTRATION FOR THE HEALING ARTS

The Chairman called on Dr. Melvin Kasten, President of the Missouri State Board of Registration for the Healing Arts, to give any comments which he might have. Dr. Kasten called attention to the September Council minutes and spoke on several issues contained therein. He stated that in regard to Dr. Martin's concern about the anesthesiologist from Canada who was licensed in one of the Carolinas, the reason she could not obtain a Missouri license was that her license in Carolina was by reciprocity and not by examination, and Missouri does not have reciprocity with Canada.

Dr. Kasten then spoke on the subject of absenteeism slips being signed by some physicians for people working in industry when, in fact, the individuals were not ill. This is expensive to industry. He stated that many people appear in court and testify against these physicians. These physicians have been warned, but there isn't much the State Board can do.

Dr. Kasten stated that just recently the FLEX examination was given to 195 individuals, of which about 140 were foreign doctors and about 45 were taking the examination for the second time. In June, the FLEX examination was given to 86 foreign graduates with 17 passing. Dr. Kasten indicated that the grading system of FLEX requires 75% on Part I and no grade lower than 60 and 75% on Part II and no grade lower than 60. He stated that the FLEX examination is costing the state money. The law now states that we can charge $25 for those taking Part I and $25 for Part II which is a total of $50. It costs the State Board $65 to give the examination. We hope that we can get this changed in the law.

Following Dr. Kasten's report, Dr. Hetlage brought up two matters of concern. One is the unsupervised use of transactional analysis in groups in which there is no psychiatric supervision. Some are cropping up and do seem to come under the realm of psychiatry.

The other item of concern is that at least in the St. Louis area, many discount houses and department stores have a nurse piercing ears. He indicated that this may or may not come under the jurisdiction of the State Board.

Dr. Kasten indicated that they have checked into the matter of piercing ears, but do not have the manpower or the money to check all of them. He indicated that he thought the Board had written to these stores, but was not certain.

Dr. Kasten stated that someone has brought up the question of whether or not the Board can license the graduates of the University of Missouri in Kansas City under the present law. The law needs to be updated.

Dr. Mayer stated that we have very carefully avoided trying to change the State Registration Law for so long that we are now functioning with one that is definitely outdated. He indicated that all he was suggesting is that when the State Board does open this up for possible changes, that very strong input from the MSMA Council be made as well as strong input from the Medical Schools of this State.

REPORTS OF THE DEANS

In the absence of Dr. Guze of Washington University School of Medicine, who attended the meeting earlier, Dr. Gulick gave a brief report regarding their building and expansion program. Dr. Gulick indicated that they moved into the new Eastern Division about a month ago and are very happy with it. It holds 500 patients. These are replacement beds and not new beds. McMillan Hospital and the old Maternity Hospital are closing. They have approval to build a parking garage underneath a part of Forest Park which will hold 1,300 cars. Children's Hospital has a new addition. They are going to completely renovate Maternity and McMillan Hospitals.

Dr. Gulick reported the part-time faculty has been requesting representation on the Executive Faculty and they have elected one man to serve on the Executive Faculty, that one man being Dr. Gulick.

Dr. Mayer reported that his tardiness on the previous day was due to the fact that the Chancellor called a meeting of all deans of the Columbia campus, elected faculty council and council of the graduate faculty of the Columbia campus because the President was about to release the third draft on the role and scope of the University. He read to the Council the statements contained therein regarding the health professions, stating that in the area of the allied health professions at the University of Missouri at Columbia and Kansas City, they shall continue to expand as funds and facilities permit. Hopefully, this will enable us to move forward. The document further indicated that the University of Missouri at St. Louis needs to look at what it is doing in nursing and health professions. He stated that the two local Columbia papers recently carried much of this on their front pages.

Dr. Mayer stated that at the September meeting of the MSMA Council, he informed the Council that he had recommended a policy change regarding admissions to the University Hospital. No objections were raised by the Council at that time. Dr. Mayer stated he pursued this with the Chancellor, President and Board of Curators and the following policy statement was adopted in October: "Any person requesting medical care, special study or diagnosis may be admitted to the University Hospital. Admission may occur by direct request of a patient, by referral of a licensed psysician or through such other means as deemed appropriate under such rules and regulations as may be adopted."

Dr. Mayer indicated that at the present time, Dr. Noback was being visited regarding accreditation by the Liaison Committee of the Council on Medical Education of AMA and the Association of American Medical Colleges. Because Kansas City is a new school, it has a visitation almost annually. The University of Missouri has this visitation about once every seven years and such visitation had just been completed. It was reported in an informal way to the President, Chancellor and Dr. Mayer that they thought we had a good institution, very possibly on the way to being a great one, and commended us for the "remarkable" progress which has occurred during the last seven years. They indicated very directly that we should be proud of the School of Medicine in Columbia.

Dr. Mayer then commented on the reorganization. In October, the Chancellor received approval to reorganize his office. The Chancellor and Vice-Chancellor constitute the office of the Chancellor. On January 1, 1973 Dr. Walter Daniel, former President of Lincoln University, will assume the responsibility of Vice-Chancellor. Under the Chancellor's office, they have created three provost positions—Provost for Administration, Provost for Academic Affairs and Provost for Health Affairs. The Chancellor sees these five individuals as having the total responsibility for the administration of the Columbia campus and its 22,000-member student body. Dr. Mayer stated that he felt it very significant that they did include health affairs in those five. Under the Provost for Health Affairs will be the Director of the University Hospital, the Dean of the School of Medicine and the Dean of the School of Nursing. Consideration is being given to the establishment of a Dean of the School of Allied Health. If such becomes a reality, this, too, would be under the Provost for Health Affairs.

Dr. Thoma indicated that St. Louis University is engaged in a building program. Its main activity has been in nailing down its affiliation with DePaul Hospital. Affiliation will be a complete one. A medical director has been appointed. They are undergoing a $6 million building program. Affiliation of OB-GYN services has already begun. If all goes well, they anticipate not having an obstetrical service immediately in the University Hospital. It is anticipated in the next decade that Firmin Desloge will be phased out as a secondary care hospital. They are not adding beds, but simply upgrading the ancillary services and putting in better specialized services, such as radiation services, etc. An all-weather bridge is being built to Bethesda Hospital. They intend to use Desloge for tertiary care only. DePaul will have a 500-bed hospital in their final building program. The Kingshighway site will be converted to a community health center. It is hoped that this will be both a University service and a private practice community center.

HCFM PROPOSAL TO MRMP

Chairman Cope called on Mr. Mark Halvorson, Executive Vice-President of the Health Care Foundation of Missouri, to present its proposal to the Missouri Regional Medical Program. Mr. Halvorson pointed out that the HCFM has been negotiating with MRMP regarding the funding activities of the Foundation. These activities have related to a data development project that was preliminary to a proposal for a grant from MRMP which will extend over a three-year period beginning in September, 1973. Council endorsement of this three-year project is being sought.

The nature of the project is to develop appropriate criteria and guidelines for evaluating the quality, accessibility and costs of medical care and defining areas of educational needs within the health care delivery system in Missouri. The title of the project is "Quality Criteria for Medical Care Evaluation." Mr. Halvorson then explained the goals, objectives and methodology of the project, indicating that this project is to continue the development of a Medical Care Evaluation Model. Mr. Halvorson stated that during the past three to six months, the HCFM has been working on a preliminary or experimental project in cooperation with MRMP.

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This experimental project was designed to determine if HCFM could develop a data base that would assist in the development of a medical evaluation model. This data base is now in the process of being developed.

Mr. Halvorson reported that the project has been endorsed by MAOPS, Mid-Missouri Areawide Comprehensive Health Planning Agency, State of Missouri Department of Community Affairs, Missouri Hospital Association and numerous other interested medical organizations that have agreed to cooperate on the project if their assistance and cooperation is sought. He stated that Council approval of this project will be sincerely appreciated and endorsement of this project by the Council will be an important factor.

Dr. Bradshaw asked for an approximation of the number of cases that the Foundation has reviewed to date. It was reported that as of August 31, 223 cases had been reviewed and there are currently about 60 cases in process. Of those, some 83% were cases submitted by health insurance carriers and a small percentage by physicians. He stated that this only gives them a start on a data base.

Mr. Halvorson reported that a survey questionnaire was sent to the participating members of HCFM on an experimental basis. He stated that in the future, they can foresee the development of specific surveys, perhaps by specialties, asking more specific questions relative to selected days and patient management of those days. We need and request full physician interest in these surveys so that the focus can be on what educational programs might logically be developed.

Dr. Hansbrough indicated that one physician submitted 51 cases and all were ruled in favor of the physician. He stated that he felt that in terms of volume of cases, each was reviewed separately and should be recorded as 51 individual cases, thus raising the number of cases which the Foundation found in favor of the physician. Mr. Halvorson indicated that in terms of volume, each one was reviewed separately, but in terms of their record keeping, they include him as one massive case. Dr. Hansbrough indicated that he felt these should be recorded as 51 separate cases. Mr. Halvorson stated that of the total cases about 50% are in favor of the physician and about 50% in favor of the carrier.

Discussion followed as to whether or not this project had been approved by the CHP (a) and (b) agencies. Dr. Rikli indicated that he felt they had a favorable report back from the A agency.

Dr. Miller stated that the total number of cases reviewed is quite different from the relatively few physicians involved. He said this also brings to note the big concern of the HCFM in its activities so far, namely, insufficient experience in reviewing cases. He said this is due to a host of reasons.

Dr. Miller called attention again to the fact that PSRO legislation has been passed as of October 27 as part of HR 1. The HCFM has had some foresight in developing a structural organization that will possibly accommodate this and will put us in the forefront in health care activities to accommodate this legislation.

Dr. Miller moved that the Council endorse the project report as submitted by Mr. Halvorson. Motion was seconded and carried.

KIDNEY DISEASE PLAN

Dr. Cope called on Dr. John F. Maher, Professor of Medicine (Nephrology), University of Missouri-Columbia. Dr. Maher indicated that a group of physician-leaders in the field of nephrology have developed a Comprehensive Multi-Regional Kidney Disease Plan for Kansas, Missouri and Southern Illinois, which is now being submitted by the Kansas, Bi-State and Missouri Regional Medical Programs in the form of a project proposal for funding by the Regional Medical Programs Service of HEW. Dr. Maher stated that kidney disease is the fourth leading killer, but the National Kidney Foundation is 19th in contributions. Many times, kidney disease does not come to the attention of physicians at a time when it could be properly treated. He stated that when most of those present graduated, there were only two nephrologists in the country. There must be more postgraduate education for the practicing nephrologists.

Dr. Maher stated that they find that patients who live in the St. Louis area may go to Kansas City or Columbia and patients in Kansas City sometimes go to St. Louis. It is felt this is inefficient, especially when a person needs dialysis three times a week. He also indicated that at times the staff is overworked to a point where there is concern regarding fatigue and at other times, the work load is too low. He stated that a registry and inventory of dialysis facilities and patients in need of therapy will help straighten these things out. He said that in order to transplant, they need to identify those individuals who are compatible and need to find donors where they can.

Dr. Maher stated that they also have a problem of one laboratory identifying the characteristics of an individual. They send the kidney and find that when it gets to the other laboratory, it doesn't work. We want to have all laboratories use a common system for all the potential recipients and have the Kansas City laboratory function as the reference laboratory so that kidneys can be taken from anywhere in this region.

Dr. Maher said that in order for this program to work, they cannot have the transplant surgeon go after the donor. This would mean considerable travel and loss of time. They would like to identify and train organ procurement surgeons in many areas throughout the region.

On motion of Dr. Hetlage, duly seconded, the Council endorsed the project as spelled out by Dr. Maher.

PROJECT REGARDING CLINICAL NURSE ASSOCIATE

Helen Yeager, M.D., Assistant Professor, Department of Pediatrics at the University of Missouri, Columbia, presented to the Council a proposal submitted to the Missouri Regional Medical Program for development of a program to define the role of a clinical nurse associate for neurologically handicapped children. This project is being submitted by the Department of Pediatrics and the Department of Nursing. Dr. Yeager indicated that their interest is to try to determine for what role the nurse can be trained to perform to care for these children. She emphasized that this is not a training proposal, but a planning proposal. She indicated that they are asking for funding for two degree nurses to develop clinical experiences and to evaluate the value of academic courses in preparing the nurse for the role of specialist in the care of neurologically handicapped children. The purpose of this project is to define ways in which a nurse with expanded responsibilities as a Nurse Associate can enrich health programs for neurologically handicapped children. Also, resources open to the nurse for her training in these areas will be explored.

On motion, duly seconded, the Council agreed to endorse this project proposal.

PROGRESS REPORT ON CONSUMER HEALTH INFORMATION PROGRAM

Dr. Rikli, Director of the CHIP Program, indicated that this program had been in the making for approximately three years and that when the proposal was funded, a letter was sent to MSMA bringing this proposal to our attention and that it is getting underway. He stated that copies of this program are available.

Dr. Rikli stated that three areas now have consumer health information centers. These areas are Salem, Warrensburg and the metropolitan area of Kansas City. The center in Salem includes the three-county area of Iron, Reynolds and Dent counties. The specialist in the Salem area is Mr. Jim Bryan. Mr. Bryan is a graduate of a health education course at the University of Missouri. The health information specialist spends about six weeks in preparation and then is sent into the area to get acquainted with the producers of health care services and with consumer groups.

The health information specialist in Warrensburg had been talking to various groups about the program. She was asked about poison control by one of these groups. She contacted the directors of the program and they supplied the necessary information to present to this group on how to control this problem.

Dr. Rikli indicated that the problems in Salem and Warrensburg are quite different than those in Kansas City. He stated that a nurse was selected to be the CHIP representative in Kansas City. He indicated that the main problem in Kansas City is helping people identify where they can get help with their health care problems. He stated that sensitive issues are being placed upon these people in these communities. He indicated that in one of the areas, there had been questions about the propriety of a physician operating a pharmacy and dispensing drugs from his office. He indicated that he felt that we need to recognize that these representatives are going to be faced with sensitive issues and hopefully, these can be brought to the attention of the appropriate organization for their consideration. He stated that the role of these CHIP representatives was not to give solutions to problems, but to obtain information for the parties involved and to help resolve their controversies.

During discussion, a question was asked as to whether or not Dr. Rikli felt that this program in any way conflicts with local and state health departments. Dr. Rikli stated that he felt that these programs complement each other and doesn't believe that they are competitive. Dr. Rikli indicated that the CHP "A" agency had expressed support for the program.

Motion was made and seconded that Dr. Rikli's report be filed. Motion carried.

Dr. Cope appointed the following to a committee to study the feasibility of inserting a year of continuing training in primary patient care in the state of Missouri: Dr. Bradshaw, Chairman; Drs. Noback, Gunn and Hansbrough.

REPORT OF THE BUILDING COMMITTEE

Dr. Matthews reported that a survey had been done and we now have clear title to the property. Title insurance has been purchased. The property has been purchased and we have taken possession of it. He stated that the architect had completed the drawings and we are ready to go ahead with the remodeling. He indicated that the building committee would like authorization to proceed with borrowing money to do the remodeling.

Dr. Matthews stated that costs of remodeling and furnishings will be somewhere in the neighborhood of $110,000.

Dr. Cope, as a member of the building committee, made a motion regarding the committee's request for authorization to borrow money for remodeling. Dr. Chandler, Vice-Chairman, took over chairmanship of the Council Meeting.

Dr. Cope moved that the Building Committee be empowered to negotiate, in its best judgment, a loan in the amount of $100,000-$110,000 for the purpose of remodeling and furnishing the property located at 113 Madison Street, Jefferson City, for use as the office of the MSMA and that the officers of the Association be authorized to sign the necessary instruments and papers to obtain the loan. Motion was seconded and carried.

REPORT OF THE COMMITTEE ON LEGISLATIVE AFFAIRS

Dr. Matthews stated that the committee had discussed numerous items and, generally, the items discussed were bills that have been pre-filed, most of which had been acted upon previously by the Council or the House. The immunity from liability for peer review physicians bill is in the works. A medical examiner system bill was introduced and calls for a pilot medical examiner system on an area-wide basis rather than on a statewide basis. The cost of a statewide system had prevented acceptance in previous sessions.

Another bill would allow embalmers to enucleate corneas. This would allow properly trained embalmers to enucleate corneas for transplants.

A proposed bill from the ophthalmologists providing for delegation of authority was discussed. This bill came about as a result of the Curteman decision. This bill would allow technicians to perform certain functions that had been delegated to them by a physician. The Committee and Council will support the delegation of authority bill.

Dr. Matthews stated that the committee had discussed the possibility of getting a sick doctor statute passed in next two or three years. The Committee would like Council approval to proceed with the planning of a sick doctor statute.

Motion was made and seconded that the legislative committee start developing sick doctor legislation. Motion carried.

AMA REPORT

Mr. Mortenson reported that an AMA membership project will be underway shortly in St. Louis City and St. Louis County. He stated that Missouri's AMA membership had dropped from last year. He urged everyone who can to attend a "National Leadership Conference" being conducted by the AMA in February.

Mr. Mortenson reported that Mr. David Weihaupt of the AMA will be coming to Missouri two or three times in the next few months to speak to groups about the AMA.

Mr. Mortenson indicated that Dr. Hoffman appreciated the hospitality extended to him during a recent visit to Springfield. Mr. Mortenson stated that all comments he had heard about the trip had been very favorable.

He stated that the legislative efforts of the AMA are going to be shifted more toward state legislation.

REPORT OF THE PLANNING COMMITTEE

In the absence of Dr. Kerr, Chairman, Dr. Cope, a member of the Planning Committee, gave the committee's report. Dr. Chandler, Vice-Chairman of the Council, took over the chairmanship of the Council Meeting.

The Committee feels that it needs direction regarding what its duties are. The Committee does not know if it is an action committee or just a committee to make suggestions.

The first item discussed by the committee was Resolution #27, "Council Chairmanship." This resolution had been re-referred by the Council to the Committee at the September Council meeting for reconsideration and a report before the Annual Meeting. The Committee tabled this resolution.

The next item discussed by the Committee was the possibility of a merger between St. Louis City and St. Louis County societies. The Committee felt that the Council should be aware of this possibility and, perhaps, develop ideas as to how this can be handled.

The third item discussed by the Committee was that the Committee is of the opinion that strict adherence to tradition constitutes a continuing deterrent to the sustained involvement of competent and interested members of the Association. The Committee recommends to the Council that an appropriate study be made of this problem.

Dr. Cope reported that the Committee recognizes the continuing problem of communications and suggests that the Communications Committee: (1) Advocate the use of short, personal letters from Councilors to members of their Districts; (2) Maintain closer liaison with hospital staffs. He indicated that, possibly, a key man could be appointed on each hospital staff to receive and disseminate communications from the Association.

The Committee discussed the status of the Immediate Past-President. It was pointed out that the Immediate Past-President is neither an officer nor a councilor and requests that legal counsel furnish clarification of the Council status of the Immediate Past-President.

The Committee suggests that the Health Care Foundation study the possibility of developing a certified hospital admission program.

The last item discussed by the committee was income-producing programs for the Association. Dr. Cope stated that the Association will have to have more money in future years and that there is a limit as to how much dues can be raised to finance the Association. The Committee recommended that the Council study the feasibility of retaining competent management consultants to recommend possible income-producing programs for the Association.

Dr. Hetlage stated that he would like to refer to Item #2 in the Committee report. He indicated that if Dr. Franklin agreed, he and Dr. Franklin would submit a statement at the next Council meeting as to what is going on in regard to the merger of St. Louis City and St. Louis County. Dr. Franklin agreed to do this, but stated that he was not sure that they would get anywhere with this.

Dr. Hetlage indicated that relative to Item #3 regarding strict adherence to tradition that delegates from his District would be happy to testify before this committee with their ideas regarding this subject. He stated that this is the logical place to do it and that a representative group would come to explain their ideas.

Dr. Hetlage also made reference to Item #4 regarding communications. He indicated that during his Coun-

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cilor District report, it was suggested that the AMA green sheet be sent to a key man on each hospital staff to be placed on the hospital bulletin board in order to aid in communications with hospital staff members.

Following considerable discussion regarding this matter, the following amended motion was presented:

> Move that "the AMA green sheet be sent to a designated member of each hospital staff for posting on the bulletin board—that man being a designate of the Councilor in each District and that such mailing begin on Jan. 1, 1973 until April 1, 1973 and then be reevaluated at the annual meeting before further continuance." Motion was seconded and carried.

Mr. McIntyre requested that each Councilor send the names of his designees in each hospital to the state office before January 1. Motion was made and seconded to accept this report. Motion carried.

Dr. Cope stated that he liked the microphone system used at this meeting and suggested that Staff look into the possibility of getting such a system for the MSMA.

FINANCE COMMITTEE

Dr. Gulick indicated that the Council had given permission to borrow money for the remodeling and furnishing of the new building. He stated that, perhaps, the Council would like to consider the possibility of selling up to $50,000 from our investment account for remodeling and borrow the rest of the amount needed. This would be quite a saving as far as interest on a loan is concerned.

Motion was made and seconded that the Finance Committee be authorized to sell a portion of our reserve securities up to $50,000 for the purpose of financing the remodeling of the new building. Motion carried.

LEGISLATIVE AFFAIRS COMMITTEE

Dr. Matthews stated that the Council needed to take action regarding the removal of smallpox vaccination from the mandatory list of immunizations in Missouri. The Board of Health Committee recommended that this be removed from the mandatory list. The Board of Health does not agree with the Committee, but will not oppose the bill. Dr. Matthews stated that he felt that the MSMA should take the position that it does not oppose the bill, but does feel that the physicians should go ahead and immunize their patients as they see fit. He indicated that the Academy of Pediatrics has endorsed such a bill.

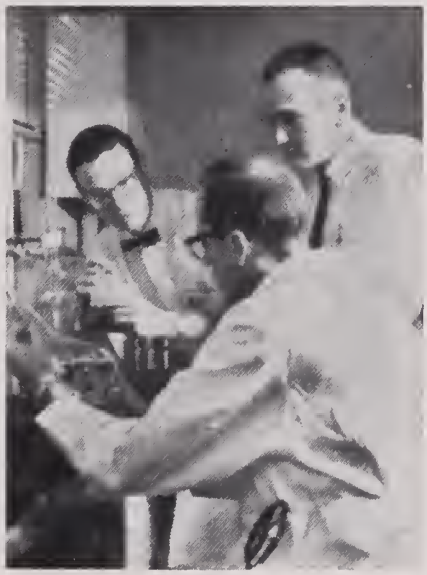
During discussion, it was pointed out that during the last few years, there have been more deaths and complications resulting from vaccination than from the disease itself. Mr. Fox stated that a recent telephone poll of pediatricians indicated that they are divided about 50-50 on whether or not to continue mandatory vaccination.

Motion was made and seconded that MSMA support a non-mandatory smallpox vaccination position with individual physicians continuing to immunize their patients as they see fit. Motion carried.

NEXT COUNCIL MEETING

The next meeting of the Council will be held on Friday, February 2 and Saturday, February 3. The Public Affairs Conference will begin Saturday afternoon and continue until noon Sunday, February 4. The meetings of both the Council and the Public Affairs Conference will be held at the Ramada Inn in Jefferson City.

A joint meeting of the Building Committee and the Finance Committee was called immediately following the adjournment of the Council Meeting.



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LEO H. POLLOCK, M.D.

Missouri Medicine in Review

FORTY YEARS AGO

The annual Hodgen Lecture was presented on January 10 at the St. Louis Medical Society Building by Dr. Frank C. Mann, Rochester, Minn.

Dr. M. Pinson Neal, professor of pathology, University of Missouri School of Medicine in Columbia, has been appointed Missouri member of the Council of the Southern Medical Association to fill the unexpired term of Dr. Walter Baumgarten, St. Louis, who resigned.

The Mississippi Valley Dermatological Society met in Kansas City on January 14. Dr. William W. Duke, Kansas City, was the guest.

The St. Louis Urological Society elected the following officers at a meeting on December 16: president, Dr. J. Hoy Sanford; vice-president, Dr. C. E. Burford; secretary-treasurer, Dr. J. F. Patton, all of St. Louis.

Dr. C. Edgar Virden, Kansas City, was elected president of the staff of St. Joseph's Hospital at a meeting of the hospital staff on January 9. Other officers elected were chief-of-staff, Dr. T. J. Beattle; vice-president, Dr. Harry L. Jones; treasurer, Dr. C. S. Capell; and secretary, Dr. Frank B. Wallace.

Dr. Llewellyn Sale, St. Louis, was elected president of the Missouri Social Hygiene Association at the 24th annual meeting of the organization in St. Louis on January 9. He succeeds Rev. Alphonse M. Schwitalla, S.J., dean of the St. Louis University Medical School, who served as president for the past five years.

TWENTY-FIVE YEARS AGO

Dr. Paul R. Hawley, M.D. has been named chief executive officer of the national organization of nonprofit Blue Cross hospital service plans and Blue Shield, formerly known as Associated Medical Care Plans. Doctor Hawley organized and developed the medical hospital program of the Veterans Administration and headed the medical work in the European Theater of Operations during World War II. He will assume his new duties on April 1. He resigned as Chief Medical Director of the Veterans Administration on December 31 and will terminate his services as special assistant to the Administrator of Veterans Affairs and as chairman of the Committee on Unification of the Medical Services of the Armed Forces in late March.

In accepting the appointment, Doctor Hawley said, in part: "Blue Cross and Blue Shield have only one objective—that of offering the best in prepaid health services at the lowest possible costs. These organizations have been operated for the benefit of the patient—not for the benefit of the doctor or the hospital. And, so long as I am in any way connected with these organizations, there will be no deviation from this fixed policy."

James U. Scott, M.D., Harrisonville, was honored recently on his 76th birthday and for the culmination of 53 years of practice in Cass County.—Ira H. Lockwood, M.D., Kansas City, has been appointed one of four directors to serve on the board of the Radiological Society of North America.

TEN YEARS AGO

Forrest C. Long, M.D., began his term as president of the medical staff officers of Methodist Hospital in St. Joseph on January 1. Other newly-elected officers are Drs. John N. Martin, president-elect and Henry C. Willumsen, vice-president. Dr. Warren Baker of Savannah was reelected secretary-treasurer.

New chief-of-staff of Boone County Hospital in Columbia is James E. Bumgarner, M.D. Dr. Ray B. Lewis was elected vice-chief-of-staff and Dr. James C. Denninghoff was elected secretary.

Gov. John Dalton has named Ralph R. Coffey, M.D., Kansas City, a member of the 16th Judicial Commission, which consists of Jackson County.

CLASSIFIED ADS

FOR SALE—Kansas City Area: Excellent clinic building suitable for large volume solo or small group practice. 20 min. to downtown K.C. Financing available. Write to Box 382, Missouri State Medical Association, Box 1028, Jefferson City, Mo. 65101.

OUTSTANDING OPPORTUNITY—Director of Child Psychiatry. Boarded or Board Eligible preferred, but not required. Must be able to obtain Missouri License by examination or reciprocity. Salary: $24,300 or $27,300 depending upon qualifications. (Additional $2,000 per annum if boarded.) Location: Small (Population 12,000) Midwestern town with two outstanding private liberal arts colleges; State University, including department of child psychiatry, 25 miles away; close to one of Midwest's largest lake areas. Combines the best of clean air country living and proximity to cultural, intellectual and recreational opportunities. Contact: Donald B. Peterson, M.D., Fulton State Hospital, Fulton, Mo. 65251, AC 314 642-3311.

MEDICAL DIRECTOR—Model City Comprehensive Health Center. A new facility for providing Medical, Dental, Nursing, Mental Health, Optical, Social, Home Health Care and Family Planning Services plus Physical, Occupational and Speech Therapy. Tremendous challenge and professional potential in a Group Practice complex, with complete medical staff. Experience in Management Administration needed. Salary is open. Send Curriculum Vitae to Project Director, Joint Community Health Services, Inc., 915 Olive Street, Suite 1228, St. Louis, Mo. 63101.

URGENT NEED—For specialists in Pediatrics, OB-GYN, ENT, Orthopedics and General Practice. Opportunities group, Associate and solo practice. Drawing area over 60,000 population. 275 hospital beds. Write President, County Medical Society, Box 311, Hannibal, Mo. 63401.

PHYSICIAN—Sutter Clinic, Inc., St. Louis, Mo., seeks physician for appointment as Associate. Six-man group, specializing in Occupational Medicine and Surgery. Office practice only. Excellent remuneration. All benefits. Regular hours. Call or write Mr. John M. Hackett, Administrator, Sutter Clinic, Inc., 819 Locust St., St. Louis, Mo. 63101 (include curriculum vitae) or call collect—Area Code 312/621-4300.

WANTED—House physician on internal medical service. Monday through Friday, 8 to 5. Applicant must have Missouri license. Remuneration on basis of experience. Contact Dr. L. B. Harrison, 1755 South Grand, St. Louis, Mo. Phone 314-771-0500.

O'FALLON PROFESSIONAL CENTER—O'Fallon, Missouri, offers an opportunity to start a new practice or relocate a stagnant one in the fastest growing area in the fastest growing county in the state, St. Charles County. Forty minutes from downtown St. Louis. New medical building to be completed in May. Over 1600 square feet available. Try it-You'll like it! Call Lawrence Bellon, D.D.S. (314) 272-5777 or (314) 227-7270.

DOCTOR'S PRACTICE—Grossing $65,000-$75,000 per year. Large home, separate apartment, complete office including equipment—entire package, $77,500. For more information, write R. E. Harland, M.D., 118 N. Main St., Ironton, Mo. 63650.

$316,000 PRACTICE—By Board Surgeon and Board Internist, 55 and 53 years old. Both retiring. Excellent opportunity to continue this practice. Good hospital affiliations and completely equipped office in Kansas City, Mo. Write Box 381, Missouri State Medical Association, 515 E. High, Jefferson City, Mo. 65101.

GENERAL PRACTITIONER OR INTERNIST—Willing to do general practice, OB optional. Salary or percentage in Corporation Practice. Financial remuneration negotiable. Town of over 5,000 near Kansas City. Recreational facilities. Minimal night call. Vacation and time for postgraduate course. Open staff JCAH Hospital. Contact C. T. Riley, M.D., P. O. Box 68, Richmond, Mo. 64085. AC 816-776-6945 or 816-776-6069.

WANTED—Physician under 40 years of age interested in joining a group in Occupational Medicine in Kansas City, Mo. Write to Box 377, Missouri State Medical Association, 515 E. High, Jefferson City, Mo. 65101.

OB-GYN and PEDIATRICIAN—To practice with a seven-physician group in a picturesque and historic river town in Northeast Missouri. Excellent hospitals and schools. Salary leading to early partnership. Write Box 376, Missouri State Medical Association, 515 E. High, Jefferson City, Mo. 65101.

SPECIALIST FAMILY PRACTICE—Generalist or surgeon. Town, 4000. 50 miles from Kansas City. Outstanding community. Large trade area. Airfield. Hospital. Radio. Good location for multiple specialty clinic. Brochure gives details. Large practice free. Long established. Retiring. Write Box 379, Missouri State Medical Association, 515 E. High, Jefferson City, Mo. 65101.

RADIOLOGIST—Board eligible, Diagnosis and Nuclear Medicine, 36, married, desires rural solo practice or association in Missouri. Telephone—AC 816-461-5243. Box 380, c/o Missouri State Medical Association, 515 E. High, Jefferson City, Mo. 65101.

EXCELLENT OPPORTUNITY—For board certified or board eligible anesthetist to locate in Kansas City, Mo. Call 816-923-9007 between 7 AM and 3:30 PM. St. Joseph Hospital.

IMMEDIATE CARE PHYSICIAN—No weekends or night call. $25,000 to start. One hour from Kansas City, Mo. Write Medical Director, Thompson, Brumm & Knepper Clinic, 902 Edmond St., St. Joseph, Mo. 64502.

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MSMA NEWS ROUND-UP

MISSOURI STATE MEDICAL ASSOCIATION

FEBRUARY, 1973

Legislature opens with landslide of bills

The 77th Missouri General Assembly convened early in January and immediately began hearing legislation that is of direct interest to physicians.

Of the approximately 700 bills introduced to date, close to 70 are of interest to the medical profession and several more will have to be monitored as the Session progresses in case amendments would affect medicine.

Introduction of bills will probably not end until March, so it is possible that more medically-related measures may appear.

Gov. Christopher (Kit) Bond, in his message to the House and Senate, touched on few medical subjects but did request that the lawmakers place Blue Cross-Blue Shield under state regulations.

Key Bills

Some of the key bills already introduced include:

* Senate Bill 62 would relieve physicians and surgeons from liability for actions taken by a medical review, hospital review or other review committee of which they were a member. It stipulates the committee actions must have been taken without malice and after reasonable efforts to establish facts supporting the actions.

* Senate Bill 42 would require pharmacists to place the exact name and dosage of a prescribed drug on every container label, unless otherwise directed by the physician.

* Senate Bill 3 provides for the regulation of Blue Cross-Blue Shield by the Missouri Division of Insurance. Also, House Bills 235 and 256 call for regulation of the Blues.

* Senate Bill 34 would allow a licensed embalmer who has completed a certified course to surgically remove corneas that have been donated by the deceased.

* Senate Bill 95 and House Bill 132 would remove a clause that limits chiropractors to adjusting the spine "by hand."

* Senate Bill 122 calls for the establishment of a county medical examiner system in some first and second class counties. Smaller counties would have the option to adopt the system or remain under the present coroner system.

* House Bills 302 and 342 would remove smallpox from the list of mandatory immunizations required for public school children.

* House Bill 314 provides that nonlicensed technicians could be employed by physicians to perform tests, conduct examinations and render certain treatment under the physician's supervision.

PUBLIC HEALTH COMMITTEES

Senate	
Sen. William J. Cason (Chairman)	Clinton
Sen. Raymond Howard	St. Louis
Sen. A. M. Spradling, Jr.	Cape Girardeau
Sen. Ike Skelton	Lexington
Sen. Robert A. Young	St. Ann
Sen. James A. Noland, Jr.	Osage Beach
Sen. William J. Esely	Bethany
Sen. Ralph Uthlaut, Jr.	New Florence
Sen. Frank Bild	St. Louis
House	
Rep. Bill J. Crigler (Chairman)	Fayette
Rep. Bob F. Griffin	Cameron
Rep. Alex J. Fazzino	Kansas City
Rep. Howard E. Hines	Independence
Rep. Judith O'Connor	Bridgeton
Rep. Gerald Roderick	Kansas City
Rep. Harold J. Esser	Kansas City
Rep. Ray S. James	Kansas City
Rep. Eugene Lang	Warrensburg
Rep. Carrol McCubbin	Eldon

Please See "Legislature" Inside

115TH ANNUAL SESSION

Record 27 scientific sessions set for MSMA Conference

A record number of scientific sessions has been scheduled for the 115th Annual Session of the Missouri State Medical Association, March 29 - April 1, in St. Louis.

Twenty-seven scientific sessions, 20 sponsored by interspecialty groups, will highlight the four-day conference.

Delegates' Handbooks, which provide members of the House with essential advance information about issues to be presented at the Annual Session, are now being prepared. By having this information in advance, delegates have an opportunity to give it careful study and discuss issues with their local medical society colleagues.

However, very few resolutions from local medical societies for inclusion in the Handbook have been received at MSMA Headquarters.

Due to the large number of resolutions introduced at the opening session of the House in the past, the House adopted a new policy during the 1972 session which states: "All resolutions to appear in the Handbook must be received at the Association office **45 days prior to the opening session** of the House." That would mean a deadline of Feb. 12.

Any resolutions to be introduced after that time must be made available to the House of Delegates 24 hours before the sessions at which it is to be introduced. At least 200 copies of the resolution or funding for same must be supplied by the individual or society introducing the resolution.

At the **Second Session** of the House, the same procedure would be followed, but such introduction would be allowed only if approved by **two-thirds** of the delegates voting. The same procedure would be followed for the **Third** Session, but it would then take a **unanimous** vote of the House to allow introduction.

Component societies are urged to send in their resolutions to insure they will be included in the Delegates' Handbook. As mentioned, the deadline for resolutions is Feb. 12.

Delegates to vote on two Constitution amendments

Delegates attending the 115th MSMA Annual Session that will be held March 29-April 1, 1973, will vote on two amendments to the Constitution. The first amendment amends Article IX of the Constitution to read as follows:

> **"Petitions signed by 10% of the active members of the Association, including petitioners representing at least one half of the component medical societies, will initiate a referendum regarding changes in the Constitution or Bylaws or questions before the House of Delegates or Council. A majority vote of all active members of the Association responding shall determine the question."**

The other amendment implements Resolution 8 "Representation for Medical Students" and amends Article IV of the Constitution by adding the following sentence thereto:

> **"Included also in the House of Delegates shall be two student delegates, each from a difdent body of each of the medical schools in the State of Missouri, who shall have the same rights and privileges as other delegates."**

If this change in the Constitution concerning the medical student delegates is adopted, a corresponding change will be necessary in the Bylaws. The Constitution and Bylaws Committee has recommended the following amendment to the Bylaws:

> **"Each of the medical schools in the State of Missouri shall be entitled to send each year two student delegates, each from a different class, elected by the student body of the said medical school. The names of such student delegates shall be certified by the Dean of said medical school to the Secretary of this Association thirty days before the Annual Session. Such student delegates shall have all the rights and privileges of all other delegates."**

The Committee on Constitution and Bylaws is presently studying all of these changes and will have other recommendations for the Delegates before the Annual Session.

New Task Force to stress importance of Pap Tests

MacDonald D. Bonebrake, M.D., of Springfield chaired the initial meeting in Jefferson City on Jan. 7 of a newly-formed Task Force to stress the importance of Pap Tests for the early detection of cervical cancer in the women of Missouri.

The task force has a four-year goal of devising ways and means for all women, and primarily those in "high risk groups," to obtain a Pap Test by 1976. The test is applicable to all women over 20 years of age and for younger women at risk.

Composing the Task Force in Missouri, which compliments similar task forces in all other states, are prominent representatives from various disciplines throughout the state, including the Woman's Auxiliary to the M.S.M.A., education representatives, medical societies, etc.

Although spearheaded by the American Cancer Society, Missouri Division, Inc., the Missouri Uterine Cancer Task Force is designed to include the broadest possible spectrum of organizations and individuals concerned with this problem.

Continued from Page 1

Legislature

* Senate Bills 48 and 57 call for licensing and regulation by the state of ambulances, attendants and drivers and their apprentices. The measures also set equipment standards and outline operating requirements.

* Senate Bill 134 is an emergency medical care measure which would utilize Highway Patrol helicopters as emergency vehicles.

* House Bill 173 would change the statute of limitations law regarding physicians. Currently, a malpractice suit must be brought within two years of the act. The new law would extend the limitation to two years from the date of ascertainment.

* An abortion bill was introduced at press time which would include provisions for abortions after the 20th week of pregnancy.

Controlled Substance Regulations

A summary of the Missouri Controlled Substance Regulations were recently mailed to each individual and firm registered under the act by the Bureau of Narcotics and Dangerous Drugs, Missouri Division of Health.

The purpose of the act is to provide more effective controls over narcotic and dangerous drugs in an effort to prevent them from being diverted from their intended medical uses to illicit markets, abuse and misuse and to provide for enforcement of the laws and regulations by state and local authorities.

Physicians, dentists, veterinarians, and other practitioners who administer, prescribe or dispense any of the drugs controlled by this legislation are required to register with the Missouri Division of Health. Registration at the state level is now **required** prior to registration or re-registration with the Federal Bureau of Narcotics and Dangerous Drugs.

Any physician who has not registered should contact the Bureau of Narcotics and Dangerous Drugs, Missouri Division of Health, Broadway State Office Building, Jefferson City, Mo. 65101, and an application form will be sent.

Complete copies of the regulations and statutes as well as additional copies of the summary are available and will be sent upon request.

Registration Form

Large and Small Hospital Organization

March 1-2 at Columbia

Name ______________________

Address ______________________

City-State ______________________

Hospital ______________________

Mail to:

Fred D. Roberts
Missouri Regional Medical Program
Lewis Hall, 406 Turner
Columbia, Mo. 65201

Hospital Conference scheduled

A second conference for health service providers, "Large and Small Hospital Organization for the '70s," will be held March 1-2 at the Ramada Inn in Columbia.

The Conference was established last year in an effort to improve communication among hospital medical staff, administrators and board members. Any individual concerned with the problems of health services delivery is urged to attend.

Keynote speaker Robert M. Cunningham, Jr., editor and publisher of **Modern Hospital**, will set the conference theme, "public and professional accountability for the quality, accessibility and cost of health care services."

The Missouri State Medical Association has joined with the Missouri Regional Medical Program, Bi-State Regional Medical Program, Missouri Hospital Association and Missouri Association of Osteopathic Physicians and Surgeons in co-sponsoring the Conference.

The program is acceptable for eight elective hours by the Academy of Family Physicians.

Registration, which includes dinner, breakfast and coffee breaks, is $60 for a team of three from one hospital and $25 for each additional participant. Checks should be made payable to Hospital Organizational Conference and mailed to Fred D. Roberts, Missouri Regional Medical Program, Lewis Hall, Columbia, Missouri, 65201. (See Registration Form on preceding page)

For more Conference details, contact the MSMA Headquarters, Box 1028, Jefferson City, Mo., 65101.

Registration for the Conference begins at 11 a.m., Thursday, March 1. Arthur E. Rikli, M.D., coordinator of the Missouri Regional Medical Program, will open the meeting at 1 p.m.

Program highlights include:

Thursday, March 1

1:15 p.m. — **"Public and Professional Accountability for Health Care Services"** — Robert M. Cunningham, Jr., Editor and Publisher, Modern Hospital

2:00 p.m. — **"Legislative Controls and Interventions"** — Charles Jacobs, Attorney, JCAH

3:15 p.m. — **"A Student's Assessment of Health Wants and Needs"** — Samuel W. Cullison, SAMA, University of Missouri-Columbia, School of Medicine

3:30 p.m. — **"Consumer Advocates' Assessments of Health Wants and Needs"** — Mrs. Evelyn Welton, Health Resources Institute; and the Rev. R. W. Beard, Presbyteria of Northeast Missouri

4:00 p.m. — **Panel Discussion** — All previous speakers participating

5:00 p.m. — **Session Ends**

6:30 p.m. — **Dinner**
Presiding, Robert S. Mosser, M.D.
Speaker, E. Grey Dimond, M.D., Provost for Health Services, University of Missouri-Kansas City School of Medicine: **"Relationship of Medical Training Programs to Public and Professional Accountability for Health Care Services"**

Friday, March 2

7:30 a.m. — **Breakfast Workshops**
(Choice of one)
"Problem-Oriented Medical Records" — Edward J. Twin, M.D., Executive Director, Kansas City General Hospital
"Emergency Care" — Allen Klippel, M.D., Director, Emergency Medical Services for St. Louis
"Recruitment of Manpower for Health Services" — Robert S. Mosser, M.D., Professor of Medicine, University of Missouri-Kansas City School of Medicine

9:00 a.m. — **"Certificate-of-Need Legislation"** — Harald Graning, M.D., Director, Health Care Facilities Services, HEW

9:45 a.m. — **"Hospital Cost Containment"** — D. Eugene Sibery, Executive Vice President, Blue Cross Association

11:00 a.m. — **"Peer Review"** — John I. Matthews, M.D., Treasurer, Health Care Foundation of Missouri

11:45 a.m. — **"Granting and Periodically Reviewing Professional Privileges"** — Charles Jacobs, JCAH

12:30 p.m. — **Adjournment**

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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are rever
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irregularities, nausea and constipation
extrapyramidal symptoms, increased a
decreased libido—all infrequent and
generally controlled with dosage reduction; changes in EEG patterns (low-volt
fast activity) may appear during and af
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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Special Features

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115th MSMA Annual Session
March 29-April 1, 1973 St. Louis

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Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy effect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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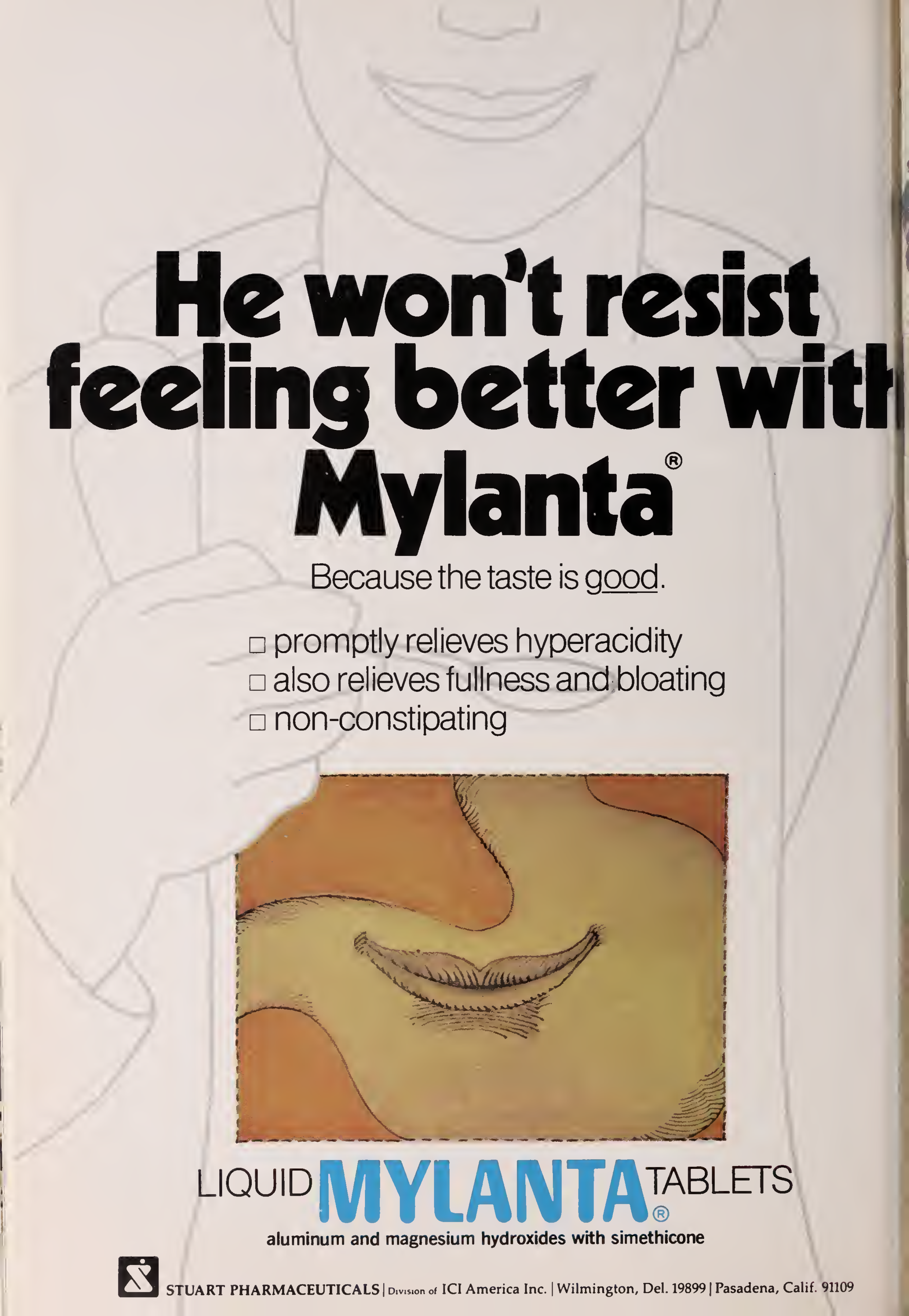

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MSMA

NEWS

ROUND - UP

March, 1973

Walter T. Gunn, M.D.
President

E. A. Stricker, M.D.
President-Elect

Dr. Stricker to become MSMA President at Annual Session

Emil A. Stricker, M.D., will become the resident of the Missouri State Medical As-ociation on Saturday night, March 31, dur-g banquet ceremonies at the 115th Annual ession in the Chase-Park Plaza in St. Louis.

Dr. Stricker, a St. James surgeon, will re-eive the gavel from outgoing MSMA Presi-ent, Walter T. Gunn, M.D., of St. Louis.

A native of St. James, Dr. Stricker re-eived his Bachelor of Science degree from ne University of Missouri-Columbia and is M.D. degree from Northwestern Univer-ity Medical School in Chicago. He interned t St. Louis City Hospital. Dr. Stricker is a ellow of the American College of Abdomi-al Surgery.

A member of the Board of Missouri Boystown in St. James, Dr. Stricker is surgeon for the Soldiers Home in St. James, chief of surgery at the Phelps County Hospital in Rolla and operates a medical clinic in Rolla.

Active for many years in civic and fraternal groups, he is past-president of the St. James Chamber of Commerce, St. James Lions Club and St. James Board of Aldermen. He is also past-president of the Phelps County Historical Society and Phelps County Centennial Association. He is a member of the Masonic and IOOF Lodges.

Dr. Stricker, who served as Ninth District Councilor for 12 years before being elected President-Elect last spring, is a noted livestock raiser and has the largest registered Angus herd in Missouri.

QAP will be prime topic at at TAP Institute

QAP

The Quality Assurance Program, a peer review, medical audit and medical utilization plan proposed by the American Hospital Association, will be one of the topics at the TAP Institute, May 11-13 at the Lodge of the Four Seasons, Lake of the Ozarks.

The Institute is an information program designed for physicians, hospital administrators and trustees and is organized by the Joint Commission on Accreditation of Hospitals. The Missouri State Medical Association and the Missouri Hospital Association are co-sponsoring the May meeting.

QAP, which has drawn much interest from physicians and hospitals alike, was added to the Institute program when it became obvious that more information on QAP was urgently needed.

Registration for the Institute may be made by sending a check for $50 to the Missouri Hospital Association, Box 1044, Jefferson City, Mo. 65101.

Upon receipt of the registration fee, each registrant will be mailed a reservation form to complete and return to the Lodge of the Four Seasons.

Tour response is good

The response to the Missouri State Medical Association's summer tour, Scandinavian Adventure, has been good. However, there is still space available for those interested in taking the travel medical seminar.

Physicians and their families who take the tour will leave directly from Kansas City or St. Louis on July 18 for two weeks in Sweden, Finland and Denmark.

The luxury Scandinavian Adventure includes direct round trip flights on chartered World Airways private jets, deluxe hotels, two gourmet meals each day at a choice of the finest restaurants and many more exclusive features. The price for the tour is $868.

Also, arrangements have been made for a comprehensive medical seminar covering a wide variety of medical interests.

For more information on the tour, write for a brochure in care of the Missouri State Medical Association, Box 1028, Jefferson City, Mo. 65101.

MSMA protests Phase 3 controls on physicians

The continuatio
of economic co
trols on physician
under Phase 3 of th
Economic Stabiliz
tion Program h
been protested by th
Missouri State Me
ical Association.

Walter T. Gunn, M.D., Association Pr
ident, issued a News Release outlining th
Association's position and sent copies of th
Release and a letter to Missouri's Congres
men.

"Physicians across the country ha
readily complied with the Administratio
efforts to stabilize wages and prices un
Phases 1 and 2," stated Dr. Gunn. "In fa
physicians' fees rose only 2.7 per cent si
the beginning of controls in August, 19
compated with a 4.3 per cent rise in the
services component of the Consumer Pr
Index."

"The retaining of physicians under t
2.5 per cent mandatory guidelines wh
freeing most of the rest of the econo
from any mandatory guidelines is discri
inatory," said Dr. Gunn. "We only ask th
we be treated in the same manner as oth
professionals — attorneys, accountants, arc
tects, for example — who are under volunta
guidelines."

Dr. Gunn added that to limit physicia
to a mandatory 2.5 per cent fee increa
while, more or less, releasing controls
those services and goods which the phy-
cian must purchase will most certainly ha
an adverse effect on the medical professi

The News Release received wide use
the state media.

Physicians weren't completely forgott
when the President removed most wage a
price controls during Phase 3 of the E
nomic Stabilization Program — *physicia*
according to new regulations, are no long
required to post or keep signs or price sch-
ules for public inspection.

Remodeling work continues

Remodeling work is continuing on th
new Headquarters for the Missouri Sta
Medical Association in Jefferson City.

The building, located at 113 Monr
St., is across the street from the Go
ernor's Mansion and one block from th
State Capitol.

A feature article in the April issue
Missouri Medicine will describe th
building's history, include a map i
dicating its location and show phot
graphs of the structure.

Annual Session set March 29-April 1

A Prelimimary Program detailing activities at the 115th Annual Session of the Missouri State Medical Association has been mailed to all MSMA members.

The Annual Session, to be held March 29 - April 1, at the Chase-Park Plaza in St. Louis, is expected to draw a record number of registrants. To members outside the St. Louis area, reservation cards for the hotel were included with the program.

The Session will feature many high- ;hts including, of course, the Past Presi- nts Banquet, Saturday, March 31. E. A. ricker, M.D., of St. James, will be in- alled as President.

Lt. Gov. William C. Phelps, the first ›publican Lieutenant Governor elected in issouri in 44 years, will be the banquet ›eaker.

Also, Past Presidents of the Association ll be honored as will members of the 50- ›ar Club.

Awards will be presented to medial rep- sentatives as winners in the Missouri State edical Association news competition for 72. Tickets for the banquet and other ents will be on sale at the Registration esk in the hotel.

The scientific session being held as part the 115th Annual Convention of the MSMA ill offer physicians a wide choice of pro- ams on a variety of topics.

Several specialty organizations will spon- ›r continuing medical education programs nd some of the specialty groups are holding nnual meetings along with the MSMA.

The scientific sessions are listed on the ack cover of the Preliminary Program ıailed to members. The entire program is lso published on pages 146-150 of this is- ue.

Scientific sessions are scheduled all day Friday and Saturday, March 30-31. Speakers at the General Session at 9 a.m. Friday will be Rep. James W. Symington, D-Mo., and Rep. Tim Lee Carter, R-Ky.

Symington, of St. Louis, is serving his third term in the House of Representatives. He is a member of the Subcommittee on Public Health and Environment. His topic will be: "Health: The Federal Legislative Challenge."

Rep. Carter, one of three practicing physicians in Congress, will talk on, "The Federal Role in Medicine."

Three speakers will address the General Session at 9 a.m. Saturday. They are Edward C. Rosenow, Jr., M.D., Philadelphia, Pa., Executive Vice-President, American College of Physicians; Robert A. Chase, M.D., Stanford, Calif., Chairman, Graduate Education Committee, American College of Surgeons; and William B. Hildebrand, M.D., Menasha, Wis., Chairman, Council on Medical Services, American Medical Association.

The MSMA House of Delegates will meet at 1:30 p.m. Thursday, March 29; 4 p.m. Friday, March 30; and 7:30 a.m. Sunday, April 1.

Guest speaker at the MSMA General Luncheon at 12:30 p.m. Saturday, March 31, will be James H. Sammons, M.D., Baytown, Tex., Vice Chairman of the AMA Board of Trustees.

A full Auxiliary program is on tap with members and non-members of the Auxiliary invited to attend.

ATTEND YOUR ANNUAL SESSION!!

Council endorses Medicare resolution

The MSMA Council endorsed a policy resolution regarding Medicare payments options during the Feb. 2-3 meeting at Jefferson City.

The resolution, submitted by the Commission on Medical Economics, Third Party Medicine and Governmental Relations, read, "Resolved, that it is the physician's option to use either alternative — assignment or direct billing — he chooses in keeping with his judgement of the patient's needs and the intent of the patient in meeting his obligations to the physician."

The Council considered several other items of business during the two-day meeting, which was held prior to the Annual Public Affairs Conference.

Dr. Finnegan Reappointed

Actions taken by the Council include:

* Reappointed Joseph V. Finnegan, M.D., of St. Louis, as Editor of Missouri Medicine.

* Heard a report that reservations for the MSMA Scandinavia Tour are beginning to mount. The two-week tour will be departing on July 18.

* Was informed that Hector W. Benoit, Jr., M.D., of Kansas City, a Missouri delegate to the AMA and Chairman of Health Care Foundation of Missouri, has been appointed to the AMA Advisory Committee on PSRO legislation which will work with the federal government in investigating methods to implement PSRO legislation passed by Congress.

* Recommended Allen P. Klippel, M.D., of St. Louis, to represent the MSMA on the State Board of Health's Technical Advisory Committee for Medical Communications relating to emergency care situations.

Amphetamine Campaign

* Endorsed the goals of the Cancer Society's Pap Test project.

* Directed staff to inform the news media of the results of campaign to have physicians sign pledge cards to restrict their use of amphetamines and other stimulant drugs. The House of Delegates passed a Resolution in 1972 directing that pledge cards be sent to all MSMA members concerning restricted stimulant drug use. Over 1,700 pledge cards were signed by members.

* Heard a report from the Commission on Medical Economics, Third Party Medicine and Governmental Relations on a Jan. 11 meeting with Aetna Life and Casualty representatives concerning Aetna's letter to patients on physicians' fees.

* Agreed to allow the Auxiliary to the MSMA to sponsor a Hospitality Booth at the Annual Session.

* Okayed the appointment of an Auxiliary Coordinator to the MSMA to improve communications. The Coordinator would be appointed by the MSMA President with the advice of the Auxiliary Medical Advisory Board and the Auxiliary President. The Coordinator or her designated representative, could attend Council, Public Affairs, Legislative and Health Manpower Committee meetings and the annual meeting of the Missouri State Medical Foundation.

* Voted to invite the Speaker of the House to all Council meetings.

* Accepted and filed a report of the Commission on Medical-Legal Affairs dealing with video tape depositions.

HCFM Trial

* Heard a report from legal counsel that the court found in favor of the MSMA in the Health Care Foundation suit trial held in January. Plaintiffs have filed new motions.

* After hearing the report of the Constitution and By-Laws Committee, the Council voted to recommend to the House of Delegates that the Constitutional amendment concerning referendums, which is laying on the table, be changed from "A majority vote of all active members of the Association responding shall determine the question" to read "A two-thirds vote of all active members of the Association responding shall determine the question."

* Concerning the Constitutional amendment laying on the table which would provide for Representation for Medical Students, the Council directed staff to contact Deans of the medical schools and inform them of procedures for electing student delegates and request that elections be held and the student delegates be certified by the Deans. It was pointed out that should the amendment not be adopted, the students could still sit as guests.

* Heard legal counsel's definition of the status of the MSMA Immediate Past President: "The Immediate Past President is a member of the Council by virtue of the Constitution. He is not an Officer or a Councilor but is on the Council in an advisory capacity for continuity."

* Endorsed the Blue Shield Open Panel Health Care Program and urged physicians to support and participate in the program.

* Accepted a detailed Legislative Committee report outlining current health-related bills before the General Assembly.

* Voted to have the Legislative Committee draw up "sick doctor" legislation to be introduced into the General Assembly.

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The 115th Annual Session

MISSOURI STATE MEDICAL ASSOCIATION

March 29-April 1, 1973

Chase-Park Plaza Hotel St. Louis

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- MEDICAL EXHIBITS
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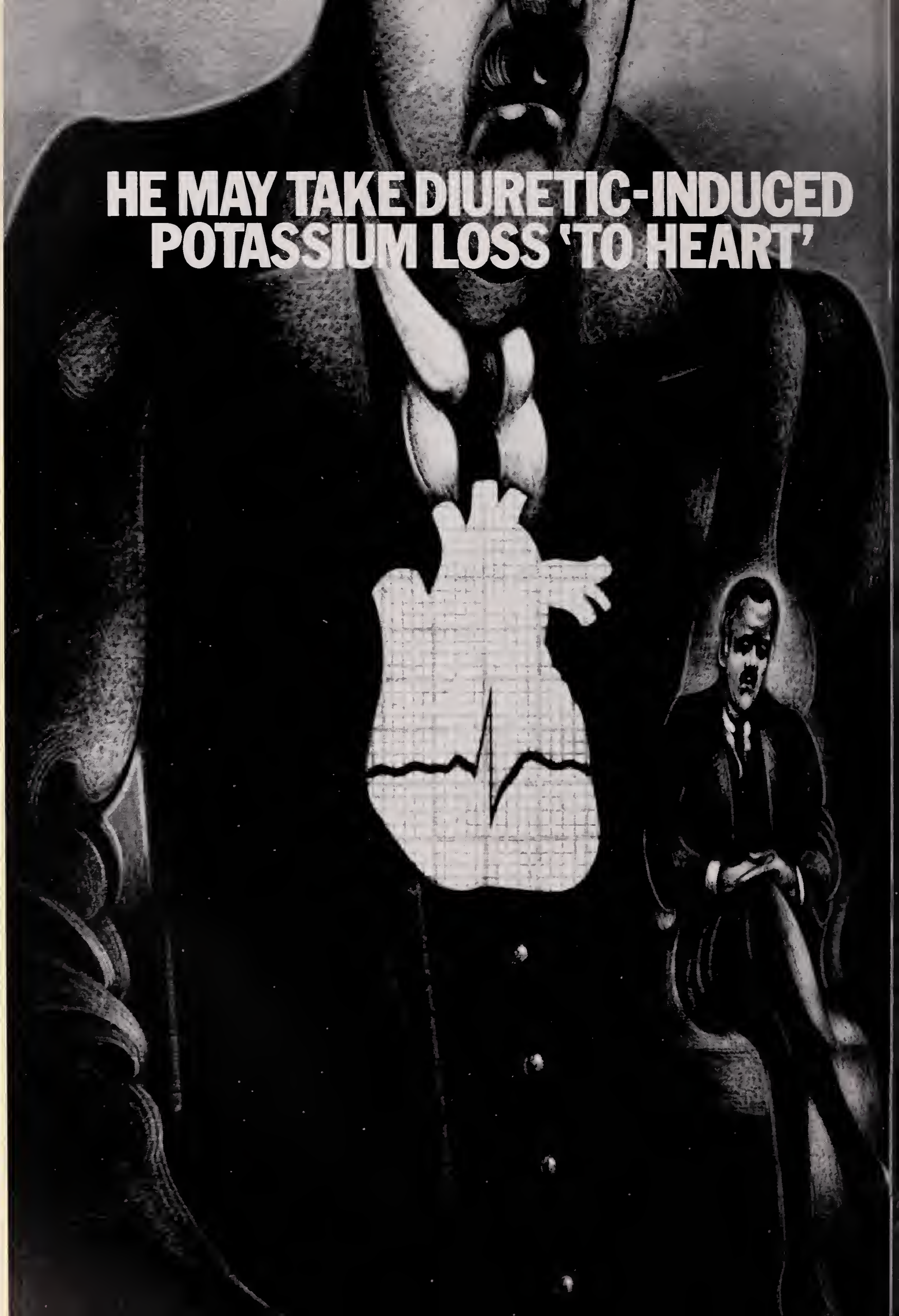
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What better way to supplement than with K-Lyte or K-Lyte/Cl. Effervesent K-Lyte tablets supply the usually recommended dose of 50 mEq. potassium daily n just two tablets. When chloride is also desirable, K-Lyte/Cl provides it in the preferred 1:1 ratio to potassium. Both forms are accurate and reliable sources of electroyte replacement. Administration in "pre-dissolved" form reduces the potential for G.I. irritation. Finally, you have a choice of three delicious flavors—a taste of oranges, tangy lime or fruit punch—all good enough to drive a patient to drink.

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Each tablet or dose must be completely dissolved before taking.
ndications: K-Lyte and K-Lyte/Cl are oral potassium supplements for therapy or prophylaxis of potassium deficiency. Particularly useful when thiazide diuretics or corticosteroids cause excessive excretory potassium losses. **Contraindiciions:** Impaired renal function with oliguria or azotemia; Addison's dlsease; hyperkalemia from any cause. **Warnings nd Precautions:** Since the amount of potassium deficiency may be difficult to determine accurately, supplements should e administered with caution, and dosages adjusted to the requirements of the individual patient. Potassium intoxication arely occurs in patients with normal kidney function. Symptoms of potassium intoxication are variable. They include istlessness, mental confusion, and tingling of the extremities. Frequent checks of the clinical status of the patient, ECG, and serum potassium level are desirable. In established hypokalemia, attention should also be directed toward other potential electrolyte disturbances. Potassium supplements should be given cautiously to digitalized patients. To minimize the possibility of gastrointestinal irritation associated with the oral ingestion of concentrated potassium salt preparations, patients should be carefully directed to dissolve each dose completely in the stated amount of water. K-Lyte/Cl contains approximately 20-25 Calories of sucrose per dose which should be considered for patients with restriction of aloric intake. **Adverse Reactions:** Nausea, vomiting, diarrhea, and abdominal discomfort may occur with the use of otassium salts. **Dosage and Administration:** Adults: 1 tablet or dose *completely dissolved*, 2 to 4 times daily, depending upon the requirements of the patient: K-Lyte: 1 tablet (25 mEq. potassium) in *3 to 4 ounces of cold or ice water;* K-Lyte/Cl: 1 dose (25 mEq. potassium chloride) in *6 ounces of cold or ice water*. The normal adult daily requirement is approximately 50 mEq. of elemental potassium. NOTE: *It is suggested that these products be taken with meals and sipped slowly over a 5-10 minute period.* **How Supplied:** K-Lyte: Effervescent tablets—boxes of 30 and 250 (orange or lime flavors). K-Lyte/Cl: Powder, cans of 30 measured doses with scoop (fruit-punch flavor). ℞

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Preliminary Program

115th Annual Session

MISSOURI STATE MEDICAL ASSOCIATION

Chase-Park Plaza Hotel, St. Louis **March 29-April 1, 1973**

Thursday, March 29

11:00 AM Registration of Delegates.
1:30 PM House of Delegates Meeting, opening session.
3:30 PM Reference Committee Meetings.

Friday, March 30

8:00 AM Registration.

9:00 AM General Session.
Introduction: Walter T. Gunn, M.D., St. Louis, MSMA President.
Health: The Federal Legislative Challenge, Congressman James W. Symington, D-Missouri.
The Federal Role in Medicine, Congressman Tim Lee Carter, R-Kentucky.

10:30 AM Intermission to view exhibits.

10:30 AM *Clinical Allergy—Diagnosis and Treatment.*
Presiding: William T. K. Bryan, M.D., St. Louis, President, Missouri State Allergy Association.
Participants:
Welcome and Introduction, William T. K. Bryan, M.D.
Diagnostic Tests in Allergic Disease, Raymond G. Slavin, M.D., Associate Professor of Internal Medicine and Chief, Section of Allergy and Immunology, St. Louis University School of Medicine, St. Louis.
Hyposensitization, Ralph Hale, M.D., Department of Medicine, Wesley Medical Center and St. Joseph Hospital, Wichita, Kan.
Food Allergy in Alcoholics, George A. Ulett, M.D., Professor and Chief, Department of Psychiatry, University of Missouri School of Medicine, St. Louis.
Sponsored by Missouri State Allergy Association.

*11:00 AM *Newer Techniques in the Diagnosis and Treatment of Thyroid Disease.*
Moderator: Thomas F. Frawley, M.D., St. Louis.
Panel Participants:
John Lindeman, M.D., St. Louis.
Garrett Hagen, M.D., St. Louis.
Lewis Chase, M.D., St. Louis.
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.

*11:00 AM *Newer Aids in the Diagnosis of Connective Tissue Disease,* John D. Arnold, M.D., Director Harry S Truman Research Laboratory, Kansas City.
Newer Treatments in Connective Tissue Disease, Jack Zuckner, M.D., St. Louis.
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.

*11:00 AM *Developmental Dyslexia and a Rational Approach to Management,* Norman E. Silberberg, Ph.D., Director of Research and Program Development, Kenny Rehabilitation Institute, Minneapolis, Minn.
Moderator: Warren A. Weinberg, M.D., St. Louis.
Panel Discussants:
Philip R. Dodge, M.D., Professor and Chairman, Department of Pediatrics and Professor of Neurology, Washington University School of Medicine, St. Louis.
Richard Burnett, Ed.D., Professor of Education and Director of the Reading Clinic, University of Missouri-St. Louis.
Warren A. Weinberg, M.D., Assistant Professor, Department of Pediatrics and Neurology, Washington University School of Medicine, St. Louis.
Manic-Depressive Illness in Children: Recognition and Treatment, Warren A. Weinberg, M.D., St. Louis.
Sponsored by Missouri Chapter, American Academy of Pediatrics.

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* Concurrent Sessions.

*11:00 AM *Psychiatric Sequelae of Vasectomy.*
Moderator: Ralph L. Biddy, M.D., St. Louis.
Panel Participants:
I. M. Thompson, M.D., Professor and Chief, Department of Urology, University of Missouri, Columbia.
Gilbert Ross, Jr., M.D., Department of Urology, University of Missouri, Columbia.
(Additional panelists to be announced.)
Sponsored by Missouri Psychiatric Association and Missouri Academy of Psychiatry.

*11:00 AM *Management of Pulmonary Complications.*
Moderator: Arthur E. Baue, M.D., St. Louis.
Participants:
Aspiration Pneumonia, George D. Zuidema, M.D., Warfield M. Firor Professor and Director, Department of Surgery, Johns Hopkins University School of Medicine, Baltimore, Md.
Prevention of Recurrent Pulmonary Emboli, Marion S. De Weese, M.D., W. Alton Jones Professor and Chairman, Department of Surgery, University of Missouri School of Medicine-Columbia.
Use and Abuse of Tracheotomy and Endotracheal Tubes, Alan R. Hopeman, M.D., Professor of Surgery (Thoracic), University of Missouri School of Medicine-Columbia.
Sponsored by Missouri State Surgical Society.

12:30 PM Missouri University Alumni Luncheon.
Youth and School Committee, Missouri Chapter, American Academy of Pediatrics Luncheon. (Open to all physicians.)
Missouri Academy of Psychiatry Luncheon.
Maternal Welfare Luncheon. Missouri Obstetrical-Gynecological Society.

* 2:00 PM *Clinical Allergy—Diagnosis and Treatment* (Continued).
Presiding: Orval R. Withers, M.D., Clinical Professor of Medicine Emeritus, University of Kansas School of Medicine, Kansas City, Kan.
Participants:
37 Years of ENT Allergy, George E. Shambaugh, Jr., M.D., Emeritus Professor of Otolaryngology, Northwestern University School of Medicine, Chicago, Ill.
Allergic Middle Ear Disease, Jack D. Clemis, M.D., Associate Professor of Otolaryngology, Northwestern University School of Medicine, Chicago, Ill.
The Effect of Allergy on the Nervous System, Frederic Speer, M.D., Director, Pediatric Allergy, University of Kansas Medical Center, Kansas City, Kan.
Adrenergic Theory of Bronchial Asthma, Charles W. Parker, M.D., Professor of Medicine, Division of Immunology, Washington University School of Medicine, St. Louis.
Panel—Entire Faculty—Allergy—Questions and Answers.
Moderator: James W. Willoughby, M.D., Lecturer in Medicine, University of Missouri-Kansas City School of Medicine.
Sponsored by Missouri State Allergy Association.

* 2:00 PM *The Management of Chronic Renal Failure.*
Moderator: John Maher, M.D., Columbia.
Panel Participants:
Robert Cuddihee, M.D., St. Louis.
Herbert Lubowitz, M.D., St. Louis.
Thomas T. Crouch, M.D., Kansas City.
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.

* 2:00 PM *Hypoglycemic Agents Revisited,* Marvin E. Levin, M.D., Assistant Professor, Clinical Medicine, Washington University School of Medicine, St. Louis.
Hyperlipidemia: Its Significance and Management, Neville Grant, M.D., Assistant Professor, Clinical Medicine, Washington University School of Medicine, St. Louis.
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.

* 2:00 PM *Abdominal Pain and Multiple Surgery—A Psychosomatic Condition?*
Moderator: Ralph L. Biddy, M.D., St. Louis.
Panel Participants:
David Davis, M.D., Professor of Psychiatry and Associate Chairman, Department of Psychiatry, University of Missouri School of Medicine, Columbia.
Richard T. Quick, M.D., Assistant Professor of Psychiatry, St. Louis University, St. Louis.

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* Concurrent Sessions.

Richard L. Sterkel, M.D., Gastroenterologist, St. Louis.
W. E. Bazzoui, M.D., Clinical Director, Mid-Missouri Mental Health Center, Columbia.
Sponsored by Missouri Psychiatric Association and Missouri Academy of Psychiatry.

* 2:00 PM *Pancreatic and Biliary Disease.*
Moderator: Hugh E. Stephenson, Jr., M.D., Columbia.
Participants:
Unusual Aspects of Pancreatic Disease, George D. Zuidema, M.D., Warfield M. Firor Professor and Director, Department of Surgery, Johns Hopkins University, School of Medicine, Baltimore, Md.
Biliary Tract Infections, William W. Shingleton, M.D., Professor of Surgery, Duke University, School of Medicine, Durham, N. C.
Sponsored by Missouri State Surgical Society.

3:30 PM Intermission to view exhibits.
4:00 PM House of Delegates, second session.
5:30 PM Missouri State Medical Foundation Annual Meeting.
6:00 PM Reference Committee Meetings.
6:00 PM Dinner Meeting: Missouri State Allergy Association.
6:30 PM Dinner Meetings:
Missouri Psychiatric Association and Missouri Academy of Psychiatry.
Speaker: Warren Williams, M.D., Speaker-Elect, Assembly of District Branches of the American Psychiatric Association, Tucson, Ariz.
Subject: *"The Structure, Objectives and Current Alternatives for the APA."*
Missouri State Surgical Society—University Club.
Speaker: Walter F. Ballinger, II, M.D., Bixby Professor of Surgery and Head of the Department, Washington University School of Medicine, St. Louis.
Subject: *"Organization, Financing, and Delivery of Surgical Services in the United States."*

Saturday, March 31

8:00 AM Registration
* 9:00 AM *Whither Medicine.*
Moderator: Maxwell G. Berry, M.D., Kansas City.
Participants:
Assurance of Quality by Knowledge and Performance or—How Else?, Edward C. Rosenow, Jr., M.D., Executive Vice-President, American College of Physicians, Philadelphia, Pa.
Dynamic Reform in Graduate Education and Credentialing, Robert A. Chase, M.D., Chairman, Graduate Education Committee, American College of Surgeons and Emile Holman Professor of Surgery and Chairman, Department of Surgery, Stanford University School of Medicine, Stanford, Calif.
The New Economics of Health Care, William B. Hildebrand, M.D., Chairman, Council on Medical Services, American Medical Association, Menasha, Wis.

* 9:00 AM *Postoperative Respiratory Care,* Henrik Bendixen, M.D., Professor and Chairman, Department of Anesthesia, University of California, San Diego, Calif.
Moderator: Robert W. Vaughan, M.D., St. Louis.
Sponsored by Missouri Society of Anesthesiologists.

10:30 AM Intermission to view exhibits.
10:30 AM *Health Care Team Concept—Spinal Cord Injury System.*
Moderator: Saul Boyarsky, M.D., St. Louis.
Participants:
Franz U. Steinberg, M.D., Chief of Physical Medicine and Rehabilitation, Jewish Hospital and Assistant Professor of Medicine, Washington University School of Medicine, St. Louis.
Simon Horenstein, M.D., Professor and Chairman, Department of Neurology, St. Louis University School of Medicine, St. Louis.
Henry G. Schwartz, M.D., Professor and Head, Division of Neurosurgery, Washington University School of Medicine, St. Louis.
Saul Boyarsky, M.D., Professor and Head of Division of Urological Surgery, Washington University School of Medicine.
(With invited discussants)

*11:00 AM *Medicine, Surgery, Anesthesia and Hepatitis,* David M. Little, Jr., M.D., Staff Anesthesiologist, Hartford Hospital, Hartford, Conn.
Moderator: Robert W. Vaughan, M.D., St. Louis.
Sponsored by Missouri Society of Anesthesiologists.

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* Concurrent Sessions.

*11:00 am *Medical Oncology—An Emerging Specialty.*
Moderator: Andrew McCanse, M.D., Kansas City.
Participants:
Principles of Cancer Chemotherapy, Reginald P. Pugh, M.D., Columbia.
Treatment of Solid Tumors, Joel Zeffren, M.D., St. Louis.
Treatment of Hematologic Malignancies, Virgil Loeb, Jr., M.D., St. Louis.
Sponsored by Missouri Division, American Cancer Society.

*11:00 am *Newer Approaches to the Management of Coronary Artery Disease.*
Moderator: G. Charles Oliver, M.D., St. Louis.
Panel Participants:
Alexander S. Geha, M.D., St. Louis.
J. Gerard Mudd, M.D., St. Louis.
Jon Cooksey, M.D., Assistant Professor of Preventive Medicine and Medicine, Washington University School of Medicine, St. Louis.
Richard B. Whiting, M.D., Assistant Professor of Medicine, St. Louis University School of Medicine, St. Louis.
Sponsored by Missouri Society of Internal Medicine and the Missouri Chapter, American College of Physicians.

*11:00 am *The Problem of Diabetic Retinopathy,* Francis A. L'Esperance, M.D., Assistant Professor of Clinical Ophthalmology, Columbia University College of Physicians and Surgeons and Director of John A. Hartford Laser Laboratory, New York, N. Y.
Moderator: Anwar Shah, M.D., St. Louis
Panel Discussants:
Isaac Boniuk, M.D., St. Louis.
King Y. Lee, M.D., Assistant Clinical Professor of Ophthalmology, University of Missouri, Kansas City.
Anwar Shah, M.D., St. Louis.
Sponsored by the Missouri Ophthalmological Society, Inc.

*11:00 am *Symposium on Health Care Costs.*
(Participants to be announced.)

12:30 pm **MSMA General Luncheon.**
Guest Speaker—James H. Sammons, M.D., Vice Chairman, Board of Trustees, American Medical Association, Baytown, Tex.
Fifty-Year Club Luncheon.
Missouri Ophthalmological Society, Inc., Luncheon.
Missouri State Society of Neurological Surgeons Luncheon.
Physiatrists Luncheon.

1:30 pm *Diagnostic Radiology in Obstetrics and Gynecology,* Lawrence A. Pilla, M.D., Assistant Clinical Professor of Radiology, St. Louis University, St. Louis. (This program is of general interest.)
Moderator: William H. McAlister, M.D., St. Louis.
Sponsored by Missouri Radiological Society.

* 2:30 pm *Cutaneous Manifestations of Internal Disease,* W. Mitchell Sams, Jr., M.D., Professor and Head, Division of Dermatology, University of Colorado Medical Center, Denver, Colo.
Moderator: Norman Asel, M.D., Columbia.
Sponsored by Missouri Dermatological Society, Inc.

* 2:30 pm *Cerebrovascular Disease and the Management of the Post-Phlebitic Extremity.*
Moderator: Albert M. Estes, M.D., Cape Girardeau.
Participants:
Pathogenesis and Diagnosis of Cerebral Ischemia, William S. Fields, M.D., Professor of Neurology, University of Texas Medical School, Houston, Tex.
Surgical Management of Cerebrovascular Insufficiency, Jesse E. Thompson, M.D., Clinical Professor of Surgery, University of Texas Southwestern Medical School, Dallas, Tex.
The Management of the Post-Phlebitic Extremity, Charles R. Doyle, M.D., Professor of Clinical Surgery, St. Louis University School of Medicine, St. Louis.
Sponsored by Missouri Heart Association, Inc.

* 2:30 pm *How I Do It.*
Moderator: Frank L. Mitchell, M.D., Columbia.
Participants:
How I Treat Circulatory Failure, Arthur E. Baue, M.D., St. Louis.
How I Do Peritoneal Patch Pyloroplasty, Cyril J. Costello, M.D., St. Louis.
A New Surgical Retractor, Hugh A. Hanna, M.D., Warrensburg.
How I Decide on Operative Cholangiogram, Max A. Heeb, M.D., Sikeston.
How I Evaluate Postoperative Oliguria, Paul G. Koontz, M.D., Kansas City.

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* Concurrent Sessions.

How I Perform Colostomy in Children, James E. Lewis, Jr., M.D., St. Louis.
How I Choose Excisions in Breast Disease, Charles E. Lockhart, M.D., Springfield.
How I Evaluate the Trauma Patient, Andrew McCanse, M.D., Kansas City.
How I Staple Suture the Intestine, Charles P. McGinty, M.D., Cape Girardeau.
How I Do Autotransfusion in Massive Hemorrhage, Horace E. Thomas, M.D., Columbia.
How I Prevent Periprosthetic Valve Heart Leaks, Clarence Weldon, M.D., St. Louis.
How I Do Intravenous Tourniquet Block Anesthesia, Earl J. Wipfler, Jr., M.D., St. Charles.
Sponsored by Missouri State Surgical Society.

° 2:30 PM Value of Periodic Physical Examinations.
(Participants to be announced.)

° 2:30 PM Physician Assistant.
(Participants to be announced.)

3:00 PM *Radiology of Total Hip Replacement*, Tom W. Staple, M.D., Associate Professor of Radiology, Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis.
A Roentgen Approach to GI Obstruction in Children, Gary D. Shackelford, M.D., Instructor in Radiology, Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis.
Necrotizing Enterocolitis, John C. Leonidas, M.D., Kansas City.
Moderator: William H. McAlister, M.D., St. Louis.
Sponsored by Missouri Radiological Society.

4:00 PM Intermission to view exhibits.

5:00 PM St. Louis University Medical Alumni Cocktail Party.

5:00 PM Washington University Medical Alumni Cocktail Party.

TBA† Missouri Dermatological Society, Inc., Cocktails and Dinner (Courtesy of Westwood Pharmaceuticals)—St. Louis Club, Pierre Laclede Center, 7701 Forsyth, Clayton.

6:30 PM Social Hour for those Attending Banquet.

7:15 PM Annual Banquet in Honor of Past-Presidents.

Sunday, April 1

7:30 AM House of Delegates, breakfast and final session.

TBA† *Autoimmune Dermatologic Diseases*, W. Mitchell Sams, Jr., M.D., Professor and Head, Division of Dermatology, University of Colorado Medical Center, Denver, Colo.—Wohl Clinic, 5th Floor, Washington University School of Medicine, 4950 Audubon.
Sponsored by Missouri Dermatological Society, Inc.

° Concurrent Sessions.
† Time to be announced.

OFFICIAL DELEGATES

115th MSMA Annual Session

County	*Delegates*	*Alternates*
Andrew	Warren C. Baker, Savannah	J. L. Villahermosa, Savannah
Audrain	Ben N. Jolly, Mexico	Edgar S. Wallace, Mexico
Barton	Thomas W. Carroll, Lamar	Herbert M. Arnold, Lamar
Boone	William B. See, Columbia	George J. Fuchs, Jr., Columbia
”	John T. Logue, Columbia	Kenneth L. Rall, Columbia
”	Benedict A. Moranville Columbia	William C. Allen, Columbia
”	Kenneth K. Keown, Columbia	Marshall T. Metzgar, Columbia
”	George P. Wilson, Columbia	Reginald P. Pugh, Columbia
”	Hugh E. Stephenson, Jr. Columbia	Thomas W. Burns, Columbia
Buchanan	Allen I. Herman, St. Joseph	R. Philip Acuff, St. Joseph
”	John T. Rogers, St. Joseph	William B. Rost, St. Joseph
”	Ernest E. Wadlow, St. Joseph	Donald J. Stallard, St. Joseph

County	*Delegates*	*Alternates*
Butler-Wayne-Ripley	George H. Ladyman Poplar Bluff	Fred Caldwell, Poplar Bluff
"	T. Eugene Ruff, Poplar Bluff	B. N. Till, Poplar Bluff
"	Barry B. White, Poplar Bluff	John L. Hunt, Poplar Bluff
Callaway	Vernon B. Jackson, Fulton	James K. Ritterbusch, Fulton
Cape Girardeau	Edwin K. Buford Cape Girardeau	Charles H. Cozean, Jr., Cape Girardeau
"	Melvin C. Kasten Cape Girardeau	D. L. Parsons, Cape Girardeau
"	Harold B. Rapp, Cape Girardeau	C. R. Talbert, Jr., Cape Girardeau
Chariton-Macon-Monroe-Randolph	D. D. Stuart, Brunswick	F. L. Harms, Salisbury
"	D. E. Eggleston, Macon	J. E. Campbell, Macon
"	F. A. Barnett, Paris	W. D. Chute, Moberly
"	P. V. Dreyer, Huntsville	C. C. Cohrs, Moberly
Clay	Donald E. Kuenzi, Kansas City	Truman B. Schertz, North Kansas City
"	Chris K. Fotopoulos North Kansas City	Richard C. Hedges, Excelsior Springs
"	Richard P. Bowles, Liberty	Charles Fowler, North Kansas City
Clinton	L. A. Ozenberger, Plattsburg	P. T. Luckenbill, Plattsburg
Cole	Thomas J. Ryan, Jefferson City	
"	Byron E. Watts, Jefferson City	
"	Robert H. Tanner, Jefferson City	
Cooper	George W. Winn, Boonville	
Dallas-Hickory-Polk-Dade	O. A. Griffin, Buffalo	Evelyn Griffin, Buffalo
"	Ben H. Koon, Bolivar	Monte R. Kahler, Bolivar
"	Lee A. McNeel, Jr., Greenfield	D. N. Mishra, Humansville
"	George G. Robinson Humansville	C. H. Barnett, Bolivar
Dunklin	George Q. Dunmire, Kennett	
Franklin-Gasconade-Warren	William R. Richardson, Union	Samuel Bonney, Washington
"	George Workman, Hermann	Harold Hoelscher, Warrenton
"	James G. Shea, Washington	Paul A. Brenner, Owensville
Grand River		
Caldwell	Frank Daley, Hamilton	George Mandler, Chillicothe
Carroll	E. W. Allen, Carrollton	John Platz, Carrollton
Daviess	Edward Nixon, Gallatin	Larry Dowell, Pattonsburg
DeKalb	B. D. Howell, Brookfield	E. L. Bales, Carrollton
Grundy	Albert Cross, Trenton	William Fuson, Trenton
Harrison	Merriam Gearhart, Bethany	Willard Ellsworth, Cainsville
Linn	John Dixon, Brookfield	Robert Smith, Brookfield
Livingston	Tom Cofer, Chillicothe	Donald Dowell, Chillicothe
Mercer	Windsor Atcheson, Trenton	Joseph Conrad, Chillicothe
Greene	Stanley S. Peterson, Springfield	H. B. Ivy, Springfield
"	Walter A. German, Springfield	Ramon Shane, Springfield
"	William M. Walker, Springfield	Donald H. Beisner, Springfield
"	MacDonald Bonebrake Springfield	Bruce I. Shackter, Springfield
"	James T. Brown, Springfield	Thomas P. Sweeney, Springfield
"	Guido Podrecca, Springfield	Richard Loeb, Springfield
"	Noel R. Lewis, Springfield	Leo M. Wyrsch, Springfield
Henry	Richard H. King, Clinton	James O. Smith, Clinton
Howard	William G. Marshall, Glasgow	M. P. Leech, Fayette
Jackson	C. Y. Thomas, Jr., Kansas City	Robert W. Doering, Kansas City

County	*Delegates*	*Alternates*
Jackson	Fred D. Fowler, Kansas City	Donald L. Fuhrman, Kansas City
”	T. J. Bryant, Kansas City	Vance E. Link, Independence
”	Edwin E. MacGee, Kansas City	Robert A. MacNaughton, Kansas City
”	Carl M. Peterson, Kansas City	Clyde V. Martin, Kansas City
”	Francis J. Ammatelli Kansas City	Byron J. Masterson, Kansas City
”	Calvin E. Engelmann Kansas City	William J. Medlicott, Kansas City
”	R. Stacy Long, Kansas City	Robert A. Moore, Kansas City
”	Thomas P. O'Farrell, Kansas City	Earl G. Padfield, Jr., Kansas City
”	Mark D. Ost, Kansas City	William T. Sirridge, Kansas City
”	Wayne K. Tice, Independence	Herbert J. Winer, Kansas City
”	Edward J. Twin, Kansas City	R. Glenn Elliott, Kansas City
”	Pat A. Barelli, Kansas City	Harry S. Jonas, Independence
”	Martin L. Crow, Kansas City	Jacob Kraft, Kansas City
”	Robert C. Fairchild Shawnee Mission, Kan.	Burnell Landers, Kansas City
”	Robert W. Forsythe, Kansas City	Robert A. Raich, Kansas City
”	John A. Griffith, Jr., Kansas City	Lafe W. Bauer, Kansas City
”	Edward E. Haith, Kansas City	James W. Neumann, Kansas City
”	William D. Hoadley, Kansas City	Ronald A. Youmans, Kansas City
”	Walter H. Jacobs, Kansas City	
”	George J. Lytton, Kansas City	
”	Andrew McCanse, Kansas City	
”	Richardson K. Noback Kansas City	
”	Milton B. Ozar, Kansas City	
”	Gordon C. Sauer, Kansas City	
”	Robert A. Slickman, Kansas City	
”	O. Dale Smith Prairie Village, Kan.	
”	W. Jack Stelmach, Kansas City	
Jasper	John R. Esther, Joplin	Andrew J. Fritsch, Joplin
”	F. Wendell Pence, Carthage	Charles H. Isbell, Carthage
”	Marvin Singleton, Joplin	Patrick E. Butler, Joplin
Jefferson	Vicente D. Deles, Crystal City	Roger H. Allbee, Crystal City
Johnson	Charles M. Lederer Warrensburg	A. L. Folkner, Warrensburg
Lafayette-Ray	William C. Lahue, Lexington	Robert R. Pavlu, Waverly
”	Charles T. Riley, Richmond	George K. Davault, Richmond
Lewis-Clark-Scotland	Landis Y. Davis, Canton	
Marion-Ralls-Shelby	Phillip B. Foreman, Hannibal	James K. Mann, Hannibal
”	Thomas J. Fischer, Hannibal	Charles A. Lichty, Shelbina
”	Edward M. Plowman, Hannibal	Julius W. Well, Palmyra
Mid-Missouri		
Crawford	Frank A. Elders, Jr., Cuba	
Dent	B. J. Bass, Salem	
Laclede	Rae W. Froelich, Lebanon	
Maries	Barbara Russell, Rolla	
Phelps	J. M. Myers, Rolla	
Pulaski	Clyde S. Miller, Waynesville	
Miller		

County	*Delegates*	*Alternates*
Mineral Area		
St. Francois	Charles W. Chastain, Farmington	
Iron	Robert F. Dettmer, Ironton	
Madison	Norman Grossman, Fredericktown	Robert A. Huckstep, Farmington
Washington	Kirby L. Turner, Potosi	
Reynolds		
Bollinger	Norma Farmer, Farmington	
Moniteau	Richard B. Fulks, California	L. M. Gallagher, California
Montgomery	S. J. Byland, Wellsville	
Morgan	Ruth Kauffman, Versailles	J. Loren Washburn, Versailles
North Central		
Adair	Milton T. English, Kirksville	
Knox	Francis Tarvydas, Edina	Waldo Isom, Knox City
Schuyler		
Sullivan		
Putnam		
Northwest		
Nodaway	E. D. Imes, Maryville	B. F. Byland, Maryville
Holt	James Humphrey, Mound City	Henry C. Bauman, Maryville
Atchison	Edward L. Niedermeyer, Tarkio	John M. Wanamaker, Rock Port
Gentry	Troy O. Morgan, Jr., Albany	G. Raymond Wempe, Maryville
Worth	Frank B. Matteson, Grant City	Albert L. Carlin, Stanberry
Ozarks		
Barry	F. R. Esparrago, Monett	R. R. Donley, Monett
Lawrence	Kenneth Glover, Mt. Vernon	W. P. Hamilton, Aurora
Stone	Fred Wommack, Crane	Joseph Gardner, Kimberling City
Christian	S. D. Roper, Ozark	
Taney	J. W. Crain, Branson	Roy Gillespie, Branson
Newton	R. E. Kenney, Neosho	R. Betz, Neosho
McDonald	G. W. Blankenship, Neosho	
Pemiscot	C. W. McKaskle, Caruthersville	
Perry-Ste. Genevieve	Job B. Pontillas, Perryville	Alfred McDermott, Perryville
"	J. F. Lutkewitte, Ste. Genevieve	Gerard H. DeGenova, Ste. Genevieve
Pettis	A. J. Campbell, Sedalia	A. R. Maddox, Sedalia
Pike	Charles H. Lewellen, Louisiana	Glenn E. Miles, Louisiana
Platte	Paul C. Vescovo, Jr., Kansas City	Phillip Wolfram, Platte City
St. Charles-Lincoln	Paul H. Rother, St. Charles	Russell Crider, St. Charles
"	John C. Soucy, St. Charles	Gary Vart, St. Charles
"	Edward Damron, Elsberry	Joseph Creech, Troy
St. Louis City	Donald R. Judd, St. Louis	Luis B. Anglo, St. Louis
"	William E. Allen, St. Louis	Matt Backer, Jr., St. Louis
"	Walter Ballinger, St. Louis	Durand Benjamin, St. Louis
"	S. F. Bowen, St. Louis	George Bohigian, St. Louis
"	R. V. Bradley, St. Louis	James R. Criscione, St. Louis
"	George Brennan, St. Louis	R. K. Danis, St. Louis
"	R. D. Brookes, St. Louis	E. G. Hamilton, St. Louis
"	Kenneth Bruns, St. Louis	S. F. Hampton, St. Louis
"	T. J. Cooper, St. Louis	Lee B. Heutel, St. Louis
"	Pablo C. deUngria, St. Louis	J. L. Hickey, St. Louis
"	Robert K. Dorton, St. Louis	John Johnstone, Jr., St. Louis
"	Joseph C. Edwards, St. Louis	Otey S. Jones, St. Louis
"	Richard H. Fallon, St. Louis	Richard J. Kloecker, St. Louis
"	Robert H. Felix, St. Louis	William C. MacDonald, St. Louis
"	Thomas B. Ferguson, St. Louis	Otakar Machek, St. Louis
"	Paul L. Friedman, St. Louis	R. R. Maginn, St. Louis
"	August W. Geise, Jr., St. Louis	Thomas F. Maher, St. Louis

County	*Delegates*	*Alternates*
St. Louis City	George L. Hawkins, Jr., St. Louis	Allan H. McCown, St. Louis
”	J. W. Haynes, St. Louis	Paul N. Meiners, St. Louis
”	James N. Heins, St. Louis	Vernon E. Michael, St. Louis
”	Ronald Hoffmann, St. Louis	Robert N. Miller, St. Louis
”	Patrick C. Hogan, St. Louis	Emil F. Miskovsky, St. Louis
”	Joshua E. Jensen, St. Louis	E. N. Mitchell, St. Louis
”	Charles Jost, St. Louis	J. V. O'Donnell, St. Louis
”	Robert W. Kelley, St. Louis	Theodore Paletta, St. Louis
”	Charles Kromer, St. Louis	Joseph C. Peden, Jr. St. Louis
”	Lawrence M. Lawton, St. Louis	Cordon W. Philpott, St. Louis
”	J. E. Lewis, Jr., St. Louis	Jose Reyes, St. Louis
”	Francis X. Lieb, St. Louis	J. S. Sciortino, St. Louis
”	P. S. Luedde, St. Louis	J. T. Y. Shen, St. Louis
”	Paul F. Max, St. Louis	A. J. Signorelli, St. Louis
”	R. B. McCloskey, St. Louis	William Smiley, St. Louis
”	Arthur W. Neilson, St. Louis	Kathleen Smith, St. Louis
”	Lawrence W. O'Neal, St. Louis	Gene Starkloff, St. Louis
”	F. Eugene Pennington, St. Louis	William Stoneman, III, St. Louis
”	H. A. Reich, St. Louis	A. R. Suba, St. Louis
”	Hubert A. Ritter, St. Louis	J. A. Swope, St. Louis
”	Herman Russell, St. Louis	R. W. Tatkow, St. Louis
”	P. B. Salanga, St. Louis	Robert Tichenor, St. Louis
”	J. B. Shapleigh, St. Louis	O. E. Tjoflat, St. Louis
”	C. S. Sherwin, St. Louis	James Utley, St. Louis
”	J. M. Stokes, St. Louis	J. A. Virant, St. Louis
”	C. M. Turner, St. Louis	Leo L. Wacker, St. Louis
”	Joseph B. Vacca, St. Louis	James Whittico, St. Louis
”	Carol F. Williams, St. Louis	Herbert C. Wiegand, St. Louis
		Edward Wittgen, St. Louis
		R. Dean Wochner, St. Louis
		Amando Ylagan, St. Louis
St. Louis County	Edwin J. Cunningham, St. Louis	Morris Alex, St. Louis
”	C. Read Boles, St. Louis	Clarence M. Benage, St. Louis
”	Barney W. Finkel, St. Louis	Jack M. Estes, St. Louis
”	John M. Laird, St. Louis	Wilbur H. Cearhart, St. Louis
”	Robert A. Mayer, St. Louis	Herluf Lund, St. Louis
”	Jules H. Kopp, St. Louis	Thomas R. Moon, St. Louis
”	Jerry N. Middleton, St. Louis	Wilbur A. Mullarky, St. Louis
”	Vernon H. Balster, St. Louis	Ivan T. Myers, St. Louis
”	Robert B. Deitchman, St. Louis	James R. Nakada, St. Louis
”	Jack R. Eidelman, St. Louis	Joseph D. O'Keefe, St. Louis
”	Allen P. Klippel, St. Louis	William L. Tomlinson, St. Louis
”	Frederick D. Peterson, St. Louis	Thomas J. Toon, St. Louis
”	Rudy Ruhling, St. Louis	Frank J. Valach, St. Louis
”	Melvin Schwartz, St. Louis	Roy A. Walther, Jr., St. Louis
”	James C. Sisk, St. Louis	Newton White, St. Louis
”	Miles C. Whitener, St. Louis	
Saline	C. A. McBurney, Slater	James A. Reid, Marshall
SEMO		
Stoddard	Edwin J. Masters, Advance	John F. Woods, Advance
New Madrid	Robert C. Ahlvin, Sikeston	Grinny H. C. Ho, Sikeston
Mississippi	Wilbur L. Davis, Charleston	Gregario L. Rodriguez, Charleston
Scott	Max A. Heeb, Sikeston	Jean R. Dupont, Sikeston
South Central		
Wright	James Hasek, Mountain Crove	Martin Hasek, Mountain Grove
Texas	Joe L. Spears, Cabool	Joe N. Wall, Houston

(Continued on page 155)

IN ASTHMA
IN EMPHYSEMA

optional therapy

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinaations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting
or is contraindicated

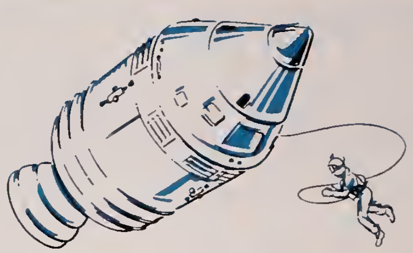
MUDRANE GG
During pregnancy or when K.I. is
contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use
or where liquids are preferred

Clinical specimens
available to physicians.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217
Manufacturers of Ethical Pharmaceuticals



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

Uro-Phosphate®

NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, 300 mg.; SODIUM ACID PHOSPHATE, 500 mg.

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

ertisement

> *"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."*
>
> *—George Sarton, from "The History of Medicine Versus the History of Art"*

Are there significant differences in bioavailability and clinical predictability among drug products?

Opinion

Results of a questionnaire to 7,000 physicians:

44.6%
Agree there is a significant difference

24.9%
Believe there is no difference

30.5%
Had no opinion

Are there significant differenc in bioavailability and clinic predictability among drug product

Teacher of Medicine

Alfred Gilman, Ph.D.
Wm. S. Lasdon
Professor & Chairman
Department of
Pharmacology
Albert Einstein
College of Medicine of
Yeshiva University

I think that there can be a very great distinction between generic drugs and brand name drugs. And that applies to products of original research that have outlived their patent protection as well as to drugs that have long been in the public domain. Let me explain why.

The Importance of the Manufacturing Environment

In terms of formulation, quality control, and the ability to reproduce an essentially identical product, batch after batch, I doubt that many firms are properly equipped to put out a product that is as carefully controlled as the product marketed by a pharmaceutical company with sophisticated research and high quality manufacturing facilities. For example, when a company comes out with its own preparation of a drug that has just lost its patent protection, there is no assurance that the drug it produces will be a therapeutic equivalent. The raw material could be identical and yet bioavailability might vary from complete unavailability to that which is equivalent to the original.

It Isn't Enough to Meet USP and NF Standards

Meeting USP and NF standards is not enough to guarantee therapeutic equivalence. In certain instances, stricter standards must be applied. Right now, the New York Heart Association has a committee that is studying the problem of digoxin equivalency. I am certain that they are going to recommend a bioavailability assay of a particular digoxin. Unless this is done, they will not recommend it for purchase or use in New York City hospitals. It represents too much of a hazard. They have gone so far as to recommend a batch-by-batch certification of bioavailability even though the company has been reproducing and marketing a digoxin product through the years.

The Problem of Controlling Bioavailability of Generics

The FDA does not have the manpower to inspect the quality control capabilities of hundreds of houses specializing in generic products. And I don't think that the average pharmacist is knowledgeable or aware of the quality and bioavailability of the infinite numbers of generic preparations. A recommendation has been made that every time a generic house (or for that matter a large pharmaceutical company) markets an already existing drug for the first time, a modified new drug application should be submitted. The manufacturer would have to show that his compound is the therapeutic equivalent of the standard compound in use, assuming that the standard compound is one that has been available for an extended period—say 15 years. This would be one indication that the control of bioavailability is beginning to get the attention that it deserves.

Clinical Predictab More Important Tha

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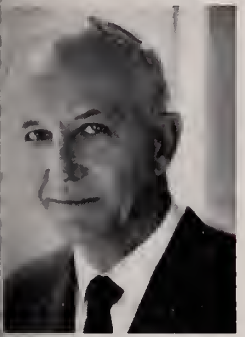
Iaker of Medicine

. J. Cavallito, Ph.D.
cutive Vice President
yerst Laboratories



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Growing Awareness of Potential for Nonequivalence

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minimize nonequivalence of drug components produced by different manufacturers. Arguments relate largely to the extent of product inequivalences. Experience over the past six years has uncovered a greater incidence of nonequivalence of products prepared by different manufacturers from generically equivalent substances than many had previously surmised.

Newer Bioavailability Studies Reveal Differences

Bioavailability may be defined as a measure of the rate and amount of absorption of a drug substance from its administered dosage form. For several years pharmaceutical scientists have proposed that bioavailability data on presumably equivalent dosage forms provide the best measure of product equivalence—short of adequate clinical trial. In their continued search for shortcuts to the evaluation of product equivalence, medical and pharmaceutical scientists have increasingly relied upon bioavailability characteristics as reflected by blood levels of a drug after its administration to human subjects.

Leading manufacturers now conduct comparative bioavailability studies on their own product dosage forms after production process changes that would have been considered inconsequential a few years ago. This isn't surprising, since there are so many possible differences in production operations that the opportunities for inequivalent generic and brand name products are numerous—even when the production process begins with identical chemical substances. Moreover, reputable manufacturers are striving to improve *in vitro* control measures, such as dissolution characteristics, which are being related more meaningfully to bioavailability reference data.

As a result of advances in scientific instrumentation and analytical methodology which permit measurements of small quantities of drug substances in the body, our abilities to detect differences in bioavailability and possible therapeutic nonequivalance have appreciably improved.

Product Selection Based on Patient Response

Improved specifications and standards can better assure the equivalence of *drug substances*. Manufacturers, compendia and regulatory agencies can all play a part. However, it is the *drug product*, not the *drug substance*, that the physician, pharmacist, nurse and patient-customer utilize. How can these individuals make or influence specific product selections to minimize variations in therapeutic equivalence of multisource drugs? Patients' responses to a drug product provide a basis of experience to aid the physician in his selection of a particular product. The nurse and pharmacist can also help detect patient responses, but ultimate responsibility must remain with the physician.

Reputation of Manufacturer as Basis for Product Selection

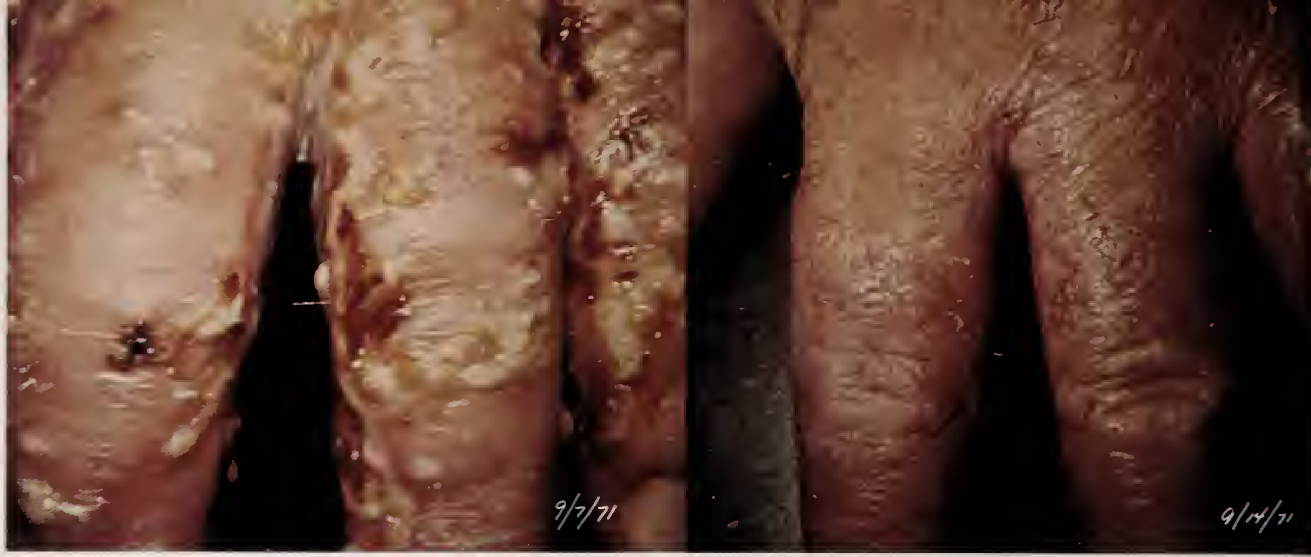
The physician, to assure that his patients receive quality health care, must rely upon the capabilities of the reputable pharmaceutical manufacturer who is equipped to develop, prepare and control a quality product of uniform, reliable therapeutic performance. Substitution with purportedly equivalent generic products that are only superficially evaluated by an imitator manufacturer can place the health of the patient secondary to factors of price or convenience for the provider.

Opinion & Dialogue

What is your opinion, doctor?
We would welcome your comments.

P·M·A

The Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005



MINOCIN® made the difference in just eight days.*

Clinical Data:

Patient: 47-year-old male.
Diagnosis: Severe pyoderma, left hand.
Culture: *Staphylococcus aureus, coagulase* positive and sensitive to MINOCIN.
Temperature: 102° F
Therapy: MINOCIN Minocycline HCl Capsules, 100 mg: 200 mg *stat,* 100 mg every 12 hours. Medication began 9/7/71. By fourth day, temperature was normal and pustular lesions considerably improved. Last dose taken 9/14/71.
Concomitant therapy: None.†

Semisynthetic
MINOCIN®
MINOCYCLINE HCl
Capsules, 100 mg: 2 *stat,* 1 q 12 h.

Indications: For the treatment of susceptible infections; *e.g., E. coli, D. pneumoniae.* For full list of approved indications consult labeling.
Contraindications: Hypersensitivity to any tetracycline.
Warnings: The use of tetracyclines during tooth development (last half of pregnancy, infancy and childhood to the age of 8 years) may cause permanent discoloration of the teeth (yellow-gray-brown). This is more common during long-term use but has been observed following repeated short-term courses. Enamel hypoplasia has also been reported. Tetracyclines, therefore, should not be used in this age group unless other drugs are not likely to be effective or are contraindicated. In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, use lower total doses, and, in prolonged therapy, determine serum levels. Photosensitivity manifested by an exaggerated sunburn reaction has also been observed in some individuals taking tetracyclines. Advise patients apt to be exposed to direct sunlight or ultraviolet light that such reaction can occur, and discontinue treatment at first evidence of skin erythema. Studies to date indicate that photosensitivity does not occur with MINOCIN Minocycline HCl. In patients with significantly impaired renal function, the antianabolic action of tetracycline may cause an increase in BUN, leading to azotemia, hyperphosphatemia, and acidosis. CNS side effects (lightheadedness, dizziness, vertigo) have been reported, may disappear during therapy, and always disappear rapidly when drug is discontinued. Caution patients who experience these symptoms about driving vehicles or using hazardous machinery while taking this drug. *Pregnancy:* In animal studies, tetracyclines cross the placenta, are found in fetal tissues, and can have toxic effects on the developing fetus (often related to retardation of skeletal development). Embryotoxicity has been noted in animals treated early in pregnancy. Safety of use during human pregnancy has not been established. *Newborns, infants and children:* All tetracyclines form a stable calcium complex in any bone-forming tissue. Prematures, given oral doses of 25 mg./kg. every 6 hours, demonstrated a decrease in fibula growth rate, reversible when drug was discontinued. Tetracyclines are present in the milk of lactating women who are taking a drug of this class.

Precautions: Use may result in overgrowth of nonsusceptible organisms, including fungi. If superinfection occurs, institute appropriate therapy. In venereal diseases when coexistent syphilis is suspected, darkfield examination should be done before treatment is started and blood serology repeated monthly for at least four months. Because tetracyclines have been shown to depress plasma prothrombin activity, patients on anticoagulant therapy may require downward adjustment of such dosage. Test for organ system dysfunction (*e.g.,* renal, hepatic and hemopoietic) in long-term use. Treat all Group A beta hemolytic streptococcal infections for at least 10 days. Avoid giving tetracycline in conjunction with penicillin.

Adverse Reaction: GI: (with both oral and parenteral use): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in anogenital region. *Skin:* maculopapular and erythematous rashes. Exfoliative dermatitis (uncommon). Photosensitivity is discussed above ("Warnings"). *Renal toxicity:* rise in BUN, dose-related (see "Warnings"). *Hypersensitivity reactions:* urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus. In young infants, bulging fontanels have been reported following full therapeutic dosage, disappearing rapidly when drug was discontinued. *Blood:* hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia. *CNS:* (see "Warnings.") When given in high doses, tetracyclines may produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.

NOTE: Concomitant therapy: Antacids containing aluminum, calcium, or magnesium impair absorption; do not give to patients taking oral minocycline. Studies to date indicate that absorption of MINOCIN is not notably influenced by foods and dairy products.

***Indicated in infections due to susceptible organisms. Culture and sensitivity testing recommended. Tetracylines are not the drugs of choice in the treatment of any staphylococcal infection.**

†Case Report, Clinical Investigation Department, Lederle Laboratories.

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York 10965 12-20 436-2

County	*Delegates*	*Alternates*
Howell	M. L. Fowler, West Plains	C. F. Smith, Willow Springs
Oregon	A. T. Walker Mammoth Springs, Ark.	
Douglas	Marvin C. Gentry, Ava	
Ozark	J. N. Wiles, West Plains	
Webster	T. M. Macdonnell, Marshfield	R. J. Bareis, Marshfield
West Central		
Bates	Robert Strobach, Butler	Charles A. Lusk, Butler
Cass	Alfred W. Eklund, Pleasant Hill	Robert Henry, Harrisonville
Cedar	Harry V. Langeluttig, Jr. Nevada	Robert L. Magee, El Dorado Springs
St. Clair	Donald H. Giesler, Osceola	
Vernon	R. John Torontow, Nevada	James J. Pascoe, Nevada

Delegates-at-Large

Hector W. Benoit, Jr., Kansas City
W. A. Bloom, Fayette
Victor Buhler, Kansas City
Donald M. Dowell, Chillicothe
Joseph L. Fisher, St. Joseph
Leonard T. Furlow, Crystal River, Florida
Kenneth Hollweg, Kansas City
David N. Kerr, St. Louis
Doyle C. McCraw, Bolivar
James R. McVay, Kansas City
Guy N. Magness, University City
Gerald L. Miller, Kansas City
Robert Mueller, St. Louis
R. O. Muether, St. Louis
Ralph Perry, Kansas City
H. E. Petersen, St. Joseph
Byron M. Stuart, Boonville
Paul R. Whitener, St. Louis

COMMERCIAL EXHIBITORS LIST

For the 115th Annual Session

Booth	*Exhibitors*
12	American Medical Facilities Corp. Hazelwood
19	Astra Pharmaceutical Products, Inc. Worcester, Mass.
39	Ayerst Laboratories New York, N. Y.
3	Blue Cross—Blue Shield St. Louis, Kansas City
47	Bristol Laboratories Syracuse, N. Y.
30	Casualty Indemnity Exchange Denver, Colo.
40	Clinical Laboratories of St. Louis, Inc. Creve Coeur
32	Coca-Cola USA Chicago, Ill.
5	Data Service Agency, Inc. Maryland Heights
38	Dictaphone Corporation Rye, N. Y.
45	The Doyle Pharmaceutical Company Minneapolis, Minn.
4	Encyclopaedia Britannica, Inc. Chicago, Ill.
15	Hoechst Pharmaceuticals, Inc. Somerville, N. J.
13	Homemakers International Company St. Louis
23	Lakeside Laboratories, Inc. Milwaukee, Wis.
2	The Medical Protective Company Fort Wayne, Ind.
22	Medserco, Incorporated St. Louis
25 & 26	MSMA Woman's Auxiliary Hospitality Booth
28	Munn's Medical Supply Co., Inc. Topeka, Kan.
17	North American Pharmacal Dearborn, Mich.
43	Pitney-Bowes, Inc. St. Louis
18	Publishers Service Center Longview, Tex.
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29	Sandoz Pharmaceuticals East Hanover, N. J.
41	W. B. Saunders Company Philadelphia, Pa.
20	G. D. Searle & Co. Chicago, Ill.
21	Missouri Seven-Up Bottlers St. Louis
37	E. R. Squibb & Sons, Inc. Princeton, N. J.
11	Stuart Pharmaceuticals Division of ICI America Inc. Wilmington, Del.
46	United Medical Equipment Co. Kansas City
24	Vitalograph Medical Instrumentation Kansas City

In lieu of exhibits, the following firms made cash donations to assist in the sponsorship of the scientific sessions:

Geigy Pharmaceuticals
Ardsley, N. Y.

Eli Lilly and Company
Indianapolis, Ind.

Merck Sharp & Dohme
West Point, Pa.

medical melange

Notes of interest from Here .... and There

Dr. Eugene M. Bricker and **Dr. Vallee L. Willman** were honored as the 23rd and 24th recipients of the St. Louis Medical Society's Gold Medal and Award of Merit at the Society's annual meeting on January 13. The Award is in recognition of meritorious effort by a physician when such efforts promise results of great benefit to humanity and the progress of scientific medicine. Dr. Bricker, Professor of Clinical Surgery at Washington University, is recognized internationally for his contributions to the development of plastic and reconstructive surgery. He has served as President of the Society of University Surgeons, Vice-President of the American Surgical Association, Vice-President of the American College of Surgeons, Chairman of the American Board of Surgery and Director of Plastic Surgery in the European Theater of Operations during World War II. Dr. Willman, Chairman of the Department of Surgery at St. Louis University, has received international recognition for his investigations in cardiovascular physiology and pathophysiology. A recent successful transplantation of a human heart by Dr. Willman and his associates received wide acclaim.

In recognition of their many contributions to the medical community, Honor Memberships were presented to **Dr. William H. Danforth, Dr. Raymond O. Muether** and **Dr. Jerome I. Simon** by the St. Louis Medical Society. Dr. Danforth is Chancellor of Washington University; Dr. Muether is professor of Internal Medicine and Pathology at St. Louis University and a Past-President of both the St. Louis Medical Society and the MSMA; and Dr. Simon is a Past-President of the St. Louis Medical Society and the St. Louis Surgical Society.

Dr. Gerald L. Miller and **Dr. Hector W. Benoit, Jr.** of Kansas City were presented the Merit Award of Jackson County Medical Society at the Annual President's Dinner on January 19. The award was established in 1941 as a symbol of professional appreciation. Purpose of the award is to demonstrate to the community and to state and national bodies of the medical profession that the contributions and spirit of certain outstanding members of Jackson County Medical Society are recognized by their peers and colleagues. Dr. Miller is Immediate Past-President of the MSMA and Dr. Benoit is a Past-President of the MSMA and a Delegate to the AMA. Merit awards have been presented previously to 20 other members of the Society. **Dr. Carroll P. Hungate** of Kansas City received two awards at the event.

Dr. Richard A. Sutter, University City, was elected to Honor Membership by the St. Louis County Medical Society on January 27. He is the eighth recipient of the award in the 69-year history of the Medical Society. The award was presented to Dr. Sutter in recognition of more than 35 years of outstanding service in the field of occupational medicine and in recognition of his professional achievements, civic interests and awards. The award cites his service as a member of the AMA Council on Occupational Health, a member of the Missouri Governor's Council on Occupational Safety and Health Task Force and a presidential appointee to the National Advisory Committee on Occupational Safety and Health among other national, state and local medical and civic associations.

WASHINGTON

The American Medical Association protested vigorously against President Nixon keeping physicians under federal regulation in Phase III of the economic controls program.

A largely voluntary set of wage-price controls was substituted for all segments of the nation's economy except food, health care activities, the construction industry and interest and dividends.

John R. Kernodle, M.D., chairman of the AMA Board of Trustees, warned that such discriminatory treatment well could result in health care support personnel leaving the field. Physicians, he said, could not be expected to accept it.

"Controls are relaxed in other areas, yet the discrimination against physicians and some three million others who serve America's health needs is now even more sharply focused," Dr. Kernodle said in a statement. "A very real possibility exists that there will be a flight of allied, ancillary and support personnel from the health field, jeopardizing the quality of care being delivered."

Dr. Kernodle pointed out that "even though the regulations as applied to health care were clearly discriminatory," the AMA had urged physicians to cooperate and they had done so with a result that their fees nationwide had increased by only 2.7% since August, 1971 when Phase I began. This compared with 4.3% for the consumer price index, 6.2% for a semi-private hospital room and 14% for legal services.

Noting that controls never were imposed on lawyers or other self-employed professionals, he said that physicians now might have to reconsider their attitude of cooperation.

"Since its inception, we in medicine have made every effort to cooperate with the government's program," Dr. Kernodle said. "While the Lords of Labor walked out, we remained in the program and tried to make it work in the public interest. The results speak for themselves.

"We have received very little cooperation in return. . . .

"Thirteen months ago, we urged physician compliance. In light of the . . . record, we shall now have to reconsider that advice."

Dr. Kernodle later took the AMA protest directly to President Nixon in a letter. It follows:

Dear Mr. President:

The American Medical Association has applauded your Administration's efforts to stabilize prices and wages for the economy. The Association has supported the overall objectives of the Economic Stabilization Program and actively cooperated with the Cost of Living Council through the Health Services Industry Committee in the application of price controls on physicians' fees.

A look at the physician component of the Consumer Price Index gives an example of the effect that "voluntary compliance" can have in curbing inflation. As a result of this Association's activities, physicians' fees rose only 1.7% under Phase II. This constitutes one third the rate of increases prior to the Economic Stabilization Program. In this respect, we have surpassed the original expectations of the Cost of Living Council, which called for halving the inflationary rates prior to Phase I.

In view of our demonstrated success during the past year, you can imagine our dismay at the announcement of plans for Phase III. Although most of the economy is now expected to "voluntarily" adhere to the general guidelines of the Cost of Living Council, the medical profession has been placed under mandatory regulations. Indeed, the medical profession has once again been singled out under special controls. The physicians of America will not accept such discriminatory treatment. This profession must not become the victim of efforts to curb inflation in the more expensive components of the health care industry, which due to their internal financial structure have been unable to decelerate increases in their prices.

The record of the past year clearly demonstrates that physicians are able to effectively control their fees through voluntary action. The record of the past year is equally clear that physicians' fees have not been an inflationary factor in health care costs. We, therefore, request that the medical profession be exempt from special regulations under Phase III, and respectfully request an early opportunity to visit with you on this and other matters of critical importance to the nation and the medical profession.

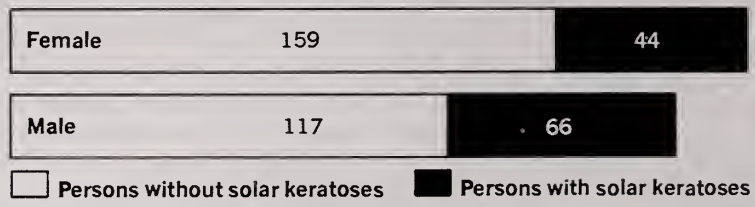
What it means to live and work i Tipton County, Tennessee

Persons who are white and over 40 have one chance in four of having solar keratoses... which may be premalignant

An epidemiologic study* conducted in Tipton County, Tennessee, revealed that 28.5% of white persons over 40 had solar keratoses; most had multiple lesions. Cluster sampling projected an estimated prevalence of 32.5% for white males and 19.5% for white females.

Though this is an unusually high percentage of affected persons, these lesions can occur in any white population, wherever people work or play out of doors.

Prevalence of solar keratoses in white persons over 40 in Tipton County, Tennessee



*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.

lar, actinic, senile keratoses

ed by many names, the typical lesion is flat ightly elevated, brownish or reddish in r, papular, dry, adherent, rough, sharply ned; usually multiple lesions, chiefly on osed portions of the skin.

quence/selectivity of response

hema in areas of lesions may begin after ral days of therapy; height of reaction y in affected areas)* usually occurs within weeks, declining after discontinuation of apy. Since this response is so predictable, ns that do not respond should be biopsied le out the presence of a frank neoplasm.

smetic results

netic results are highly favorable. Incie of scarring is low—important with multiacial lesions. Efudex should be applied care near the eyes, nose and mouth.

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Before prescribing, please consult complete product information, a summary of which follows:
Indications: Multiple actinic or solar keratoses.
Contraindications: Patients with known hypersensitivity to any of its components.
Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.
Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.
Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.
How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.
Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

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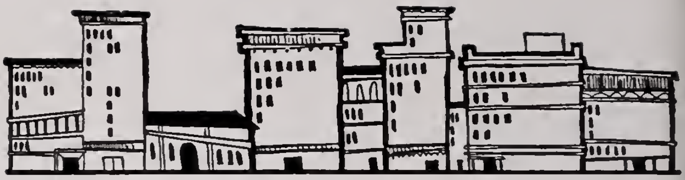
From the Medical Schools



UNIVERSITY OF MISSOURI-COLUMBIA

James O. Davis, M.D., professor and chairman. Department of Physiology, University of Missouri, is one of ten medical educators and researchers who have received 1973 Awards for Distinguished Achievement from *Modern Medicine,* a national medical journal.

Doctor Davis, cited "for proof of the involvement of the kidney in the production of aldosterone," was among more than 200 men and women nominated for the awards, which originated in 1934. Nominations come from U. S. medical school officials, leaders of medical organizations, physician-readers of *Modern Medicine,* and members of the journal's worldwide editorial faculty.

Doctor Davis is chairman of the National Council for High Blood Pressure Research, American Heart Association.

WASHINGTON UNIVERSITY

Edmund V. Cowdry, Ph.D., research professor emeritus of anatomy at Washington University School of Medicine, has been designated a Pioneer in Aging by the Institute of Gerontology, University of Michigan and Wayne State University, Detroit. Doctor Cowdry was one of seven who were recognized for their achievements as scientists and educators in gerontology by the Institute's 25th annual conference on aging.

S. *George Lesinki,* M.D., a resident in otolaryngology at the Washington University Medical Center, was awarded first prize in the basic science competition for awards for research given at the recent annual meeting of the American Academy of Ophthalmology and Otolaryngology in Dallas, Tex. In the clinical science section, second prize was won by Drs. *I. Kaufman Arenberg, John P. Murray, Erol Rauchback* and *Nicholas L. Schenk,* all residents in otolaryngology at the Medical Center. Doctors Lesinki, Arenberg, Murray, Rauchback and Schenk are National Institute of Nervous Diseases and Stroke (NINDS) research fellows.

Two research grants totalling $55,969 have been awarded to scientists in School of Medicine's Department of microbiology.

David Apirion, Ph.D., associate professor of microbiology, has received $24,300 for protein synthesis studies from the National Science Foundation's new Research Applied to National Needs Fund.

The American Cancer Society has granted $31,669 to *David Schlessinger,* Ph.D., professor of microbiology. He will study the effects of cyclic AMP on transformed (abnormally changed) cells.

The Washington University School of Medicine chapter of Alpha Omega Alpha (ΑΩΑ) national medical honor society held its annual initiation banquet on January 24 at Washington University Alumni Center. Sixteen senior medical students, one faculty member and three Medical School alumni were initiated into the society.

Faculty electee was *Walter F. Ballinger,* M.D., Bixby Professor and head of the Department of Surgery. Alumni electees were *Richard W. Hudgens,* M.D., associate professor of psychiatry and assistant dean; *Herbert Lubowitz,* M.D., associate professor of medicine and head of the Division of Nephrology, Jewish Hospital; and *James M. Stokes,* M.D., associate professor of clinical surgery and president, Medical Center Alumni Association.

William H. Danforth, M.D., chancellor of Washington University and professor of medicine, delivered the after-dinner address.

Chapter officers are *Barry* S. *Farber,* president; *David C. Hooper,* vice-president; *Virgil Loeb, Jr.,* M.D., associate professor of clinical medicine, counsellor; and *Jack Barrow,* M.D., instructor in clinical medicine, secretary-treasurer.

ST. LOUIS UNIVERSITY

Dr. Thomas F. Frawley, professor and chairman of the Department of Internal Medicine, St. Louis University School of Medicine, has requested to leave that post on Sept. 1, 1973 to devote full time to teaching, research, patients and writing.

Dr. Robert H. Felix, dean of the School of Medicine, who announced that Doctor Frawley had requested to be relieved of administrative duties, said that he would continue to serve as professor of internal medicine and head of the Section of Endocrinology in the Department of Internal Medicine at the School of Medicine.

In commenting on Doctor Frawley's ten years as chairman of the Department of Internal Medicine, Doctor Felix cited the physician's leadership in organizing and establishing the various sections in the Department of Internal Medicine. These include Arthritis, Cardiology and Pulmonary Diseases, Endocrinology, Hematology, Infectious Diseases, Experimental Medicine, Nutrition and Renal Diseases. He also commended Doctor Frawley's leadership in the American College of Physicians. He holds the office of Governor for Missouri in the College of Physicians.

Rev. Edward J. Drummond, S.J., vice-president for the Medical Center, said, "Doctor Frawley is a noted authority in the field of endocrinology and has made major contributions in the identification of glandular disorders. He also will play a key role in the planning and development of a Special Diagnostic and Treatment Center of the St. Louis Veterans Administration Hospital. This center will be especially supportive of studies on endocrine and metabolic problems relating to alcoholism, drug abuse and aging." The St. Louis Veterans Administration Hospital is affiliated with St. Louis University.

Doctor Frawley is Physician-in-Chief of the St. Louis University Hospitals and a member of the attending staff at St. Mary's Health Center.

Richard L. Stensrud, Jr. became director of the St. Louis University Hospitals on February 1.

In addition to his administrative duties, Mr. Stensrud is instructor in the Graduate School program for Hospital and Health Care Administration at St. Louis University. He joined the University Hospitals as assistant director in 1967 and has served as associate director since 1971. He was assistant administrator at the George Washington University Hospital in Washington, D. C. from 1965 to 1967.

Mr. Stensrud replaces *Ernest N. Boettcher*, M.D., who served as director from 1966 until January of 1973.

SAINT LOUIS SURGICAL SOCIETY

presents the

FORTY-NINTH HODGEN LECTURE

Guest Speaker

EUGENE M. BRICKER, M.D.

Professor of Clinical Surgery
Washington University School of Medicine
St. Louis, Missouri

"THE DEVELOPMENT OF RADICAL SURGERY IN THE TREATMENT OF PELVIC CANCER"

TUESDAY, MARCH 6, 1973—6:00 P.M.

St. Louis Medical Society Auditorium
3839 Lindell Boulevard

All Members of the Profession Invited

Continuing Education Coming Events

March 12-14	**Symposium: Pediatrics** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan.
March 14-16	**Seventh Annual Seminar on Cardiovascular Diseases** Danciger Institute for Health Sciences Menorah Medical Center, Kansas City
March 26-28	**Symposium: Surgery** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan.
March 26-29	**Seminar: Lifesaving Measures for the Critically Injured** Trauma Program of the American College of Surgeons Chase-Park Plaza Hotel, St. Louis
April 2-4	**Symposium: Ophthalmology** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan.
April 3-5	**Ninth Annual Scientific Session** American Academy of Facial Plastic and Reconstructive Surgery Chase-Park Plaza Hotel, St. Louis
April 5-6	**Clinical Approach to Allergic Disorders** Medical Center Continuing Education, St. Louis University Miller Hall, Firmin Desloge Hospital St. Louis
April 5-6	**25th Annual Midwest Cancer Conference** American Cancer Society, Kansas Division, Inc. Wichita, Kan.
April 11-12	**19th Annual Urology Seminar** Continuing Education, University of Missouri-Columbia and Kansas City Urological Society Alameda Plaza, Kansas City
April 13	**Symposium: Infectious Diseases** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan.
April 23-25	**Symposium: Anesthesiology** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan.

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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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FRANK GLENN, M.D., *New York, N. Y.*

The Role of Obstruction and Infection in Biliary Tract Disease

Special Feature

INTRODUCTION

Dr. John Thompson Hodgen, one of the great and good surgeons of St. Louis, died at age 52, now some 91 years ago. His contributions to this community were many. It is a privilege to present in his honor a discussion of the *Role of Obstruction and Infection in Biliary Tract Disease*. This subject was selected because Doctor Hodgen's untimely death was the result of a bile peritonitis as described at a called meeting of this Society.

> "Dr. Baumgarten, who had been chief physician for Dr. Hodgen, was requested to give details of the last illness. He had been summoned on Thursday evening to find his patient in undescribable agony from bilious colic, similar to those he had had periodically for some years. There was a tenderness of the abdomen, a tenderness on pressure; a tenderness below the ribs on the right side. Chloroform did not relieve him and it was necessary to give frequent injections of morphine. He had not improved during the night and after a consultation with Drs. Smith, Gregory and Johnson, leeches were applied to the abdomen which showed evidence of a general peritonitis. The pulse was sinking in volume and increasing in frequency, and the extremities were cold. Bleeding from the leeches was stopped and stimulants applied. In the afternoon the pulse went up to between 120 and 140, and became weak and thready. Several doses of stropia, hypodermically administered, staved off the result for a short time but he sank and toward seven he passed away.
>
> "Dr. Elisha Gregory then gave an account of the postmortem. On opening the abdomen, a diffusion of bile was perceived throughout the cavity. A perforated ulcer of the gallbladder was found and also evidence of general peritonitis."

The history of previous "attacks" and the course of the terminal illness indicate that obstruction and infection were the critical factors leading to death.

CHARCOT'S SYNDROME of intermittent fever, chills and jaundice, published in 1877, is evidence that obstruction and infection were long ago recognized as important factors in biliary tract disease. Their role today is of ever-increasing concern, in part because a greater proportion of our population lives to 65 years and older. Those who have calculous disease of the biliary tract are susceptible to complications. Each may be the cause of biliary tract disease and account for the primary clinical manifestations. However, their roles are somewhat different and more determinate when either or both are superimposed upon an established disease of the biliary tract regardless of its etiology. Because biliary calculi are present in 95% of patients with biliary tract disease, infection or obstruction or both account for complications or major episodes of exacerbation in the clinical course. Sometimes these are fatal.

OBSTRUCTION

The causes of obstruction in biliary tract disease may be grouped under four headings: congenital anomalies, calculi, neoplasia and stricture.

Congenital Anomalies: Atresia of segments of the ductal system, the failure of a lumen to develop, has been estimated to occur once in every 15,000 to 20,000 full-term pregnancies. If these be limited to intrahepatic ducts draining less than half of the liver parenchyma, the jaundice present at birth may clear without clinical evidence of obstruction thereafter. Congenital absence of the intrahepatic ductal system is very rare and usually is not long compatible with life. Occasionally, it is tolerated for months and years. It is not susceptible to remedial surgical measures. Congenital diverticula of the ductal system are most frequent in the common duct but also occur in the intrahepatic system. These diverticula may be the cause of pain and obstruction by compression or distortion or both of the duct proximal to their junction. Duplication of the ductal system and the gallbladder are associated with a high incidence of diminished lumens that cause partial obstruction.

Calculi: Ninety-five percent (95%) of biliary tract disease in North America is associated with calculi. Most of these form in the gallbladder. With the egress of bile from the gallbladder into the common duct, calculi, if small, may cause obstruction within the cystic duct and larger ones may block the cholecystoductal junction. The mechanism of emptying that results in increased pressure within the gallbladder is the common cause of "biliary colic." Persistence of the obstruction is often followed by hydrops of the gallbladder as illustrated by the photograph taken at operation (Fig. 1). Cultures from such specimens are usually reported "no growth." Calculi within the ductal system, other than the gallbladder and cystic duct, may result in obstruction at the distal portion of the common duct although they may become lodged in any segment. Not all calculi cause obstruction; indeed, its occurrence is unpredictable. However, the longer calculi are present within the ductal system, the larger they become, and the greater the age of the individual, the more likely is obstruction, incomplete or total, to occur. Progressive and relatively rapid obstruction in any segment of the ductal system that results in distention proximal to it, is perceived by the patient as pain or a sense of heaviness in the right upper quadrant of the abdomen. Sudden occlusion causes severe pain, whereas insidious occlusion, as sometimes occurs from calcareous material, may cause only an awareness or sense of change and discomfort in the region of the liver.

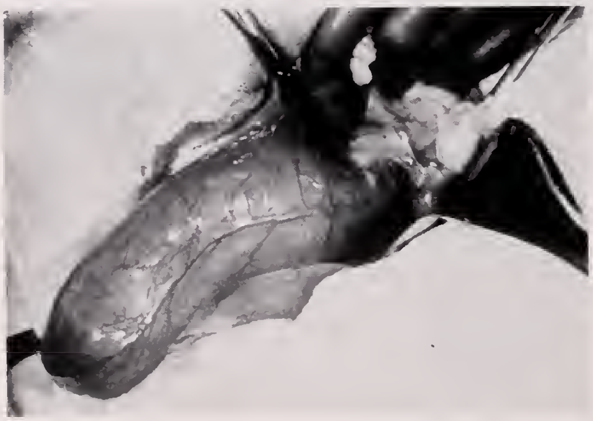

Fig. 1 Obstruction: Acute cholecystitis due to obstruction by a small calculus in the lumen of the cystic duct.

Neoplasia: Progressive obstructive jaundice unassociated with pain is usually caused by a tumor arising in the extrahepatic ductal system. The classical example is the elderly individual, deeply jaundiced, who at operation is found to have a carcinoma in the common duct. Calculi are present in less than 15% of ductal carcinomas. On the other hand, carcinomas of the gallbladder arise in the presence of cholelithiasis in approximately 90% of instances. Calculi may have caused symptoms of an acute obstructive cholecystitis that has recurred. If a tumor develops in such a situation, an episode of acute cholecystitis with failure to subside persists because of the obstruction. Thus, the diagnosis of carcinoma of the gallbladder is seldom established before operation, and that being done for "an acute cholecystitis." Carcinoma of the gallbladder tends to metastasize to the lymphatics of the common hepatic duct and cause obstruction with jaundice. The difference between obstruction due to carcinoma in the gallbladder containing calculi and that occurring in the rest of the ductal system without calculi is significant. Those with long-standing calculous disease often have infection.

Stricture: The entire biliary ductal system is subject to changes that are due to an increase in the thickness of the wall with a narrowing of the lumen. The process may be a diffuse and generalized one or it may be limited to one or several segments. The term "sclerosing choledochitis" has been used to describe it. The cause is unknown; there is no established relationship with calculous disease. The degree of obstruction is dependent upon the extent of the narrowing of the lumen. The onset is insidious; the manifestation of obstruction is dependent upon the degree of jaundice present. Although usually becoming more pronounced, it may fluctuate to recede and increase over weeks or months. With rare exception, the mural lesion is the primary cause of obstruction. Because it is slowly progressive, symptoms and disability are much less than when obstruction takes place quickly, as may occur with a calculus in the distal portion of the common duct.

Small cell carcinoma may produce a segmental involvement that grossly is indistinguishable. The diagnosis is unequivocally established by microscopic demonstration of malignant cells. These tumors are slow in growth and extension but have a poor prognosis. Those patients with sclerosing choledochitis are less predictable. Although they have a reduced life expectancy, they have a better prognosis.

There are other types of ductal obstruction generally labeled iatrogenic. These are directly related to trauma and operations on the biliary tract undertaken for biliary tract disease. An interference with the blood supply may result in an ischemia within the wall of the common duct followed by stricture formation as scar tissue replaces the normal distensible duct wall. This is a rare occurrence. More commonly, the duct is injured during operation by partial or complete surgical transection or occlusion by ligature. When the continuity of the ductal system is interrupted, be it planned for resection as in a Whipple procedure or unintentionally in the performance of a cholecystectomy, the probability that obstruction will occur later in life is considerable regardless of the type of repair.

The diameter of the lumen at the site of anastomosis tends to be reduced in time by scar tissue, regardless of the method employed to restore continuity. Even when a segment of the proximal common duct is implanted through the wall of the duodenum or jejunum into the lumen with no sutures near the site of transection, the terminal lumen gradually becomes greatly reduced within a matter of months. The degree of this stricture formation varies from individual to individual and is unpredictable. Biliary cirrhosis results from obstruction of the ductal system. The microscopic picture of liver changes are typical.

The chief characteristics in comparison to the normal liver are as follows:

(1) There is an increase in the fibroplastic proliferation; the collagen formation is between the lobules of the liver.

(2) There are small areas of liver regeneration. These vary according to the nature of the obstruction. If it has been slow and gradual and of long-standing, they are more marked than if there has been sudden and complete obstruction of short duration.

(3) There is a decrease in the interlobular bile ducts. Perhaps it is more accurate to say that they are less evident due to reduction of their lumen by the fibroplastic changes that have taken place in the tissue about them.

(4) And, finally, there is a change in the liver cell itself. This varies from patient to patient, varying in different age groups and duration and nature of the obstruction.

The process of biliary cirrhosis is irreversible. Improved function may occur with regeneration of liver tissue.

MISSOURI MEDICINE is proud to present this transcript of the 47th Hodgen Lecture which was sponsored by the St. Louis Surgical Society and presented by Doctor Glenn at the St. Louis Medical Society on March 2, 1971. Doctor Glenn, who is the Lewis Atterbury Stimson Professor of Surgery Emeritus of Cornell University Medical College, graduated from Washington University School of Medicine in 1927. His contributions to the teaching of surgery have been outstanding. His areas of investigation and publications have been extremely broad and include cardiac, vascular, endocrine, traumatic and gastrointestinal surgery. As a result of his investigation, teaching and tremendous clinical experience, Doctor Glenn is well known for his contributions to surgery of the biliary tract.

INFECTION

An extensive and comprehensive literature relative to the bacterial flora of bile indicates that most every organism commonly found in the gastrointestinal tract has been cultured from bile. In normal individuals, the bacterial count is low. Those with systemic disease, such as diabetes, advanced atherosclerosis, infections with bacteremia and the aged with marked disability, have higher bacterial counts in their bile. The bacteria most frequently cultured are: E. coli, Streptococcus fecalis, Enterobacter aerogenes, Pseudomonus aerogenes, Proteus vulgaris and

THE ROLE OF OBSTRUCTION AND INFECTION IN BILIARY TRACT DISEASE

Bacterial Flora of Bile
Escherichia coli
Streptococcus faecalis
Klebsiella aerogenes
Enterobacter aerogenes
Pseudomonas aeruginosa
Proteus vulgaris
Streptococcus viridans

Fig. 2

Streptocococcus viridans (Fig. 2). There are several mechanisms for bacteria to enter and grow in bile: (1) They pass through the liver from the blood and are excreted into the canaliculi; (2) the lymphatics infected directly from intra-abdominal organs or the blood stream liberate bacteria into the ductal system; (3) bacteria from the blood stream infect the wall of the gallbladder and bile ducts; and (4) ascending infection through the ampulla of Vater from the duodenum. G. B. Ong (1962) in a study of recurrent pyogenic cholangitis reported its production experimentally by constriction of the common duct followed by introduction of E. coli into the portal vein.

Clinically, bacterial infection of the biliary tract occurs in all decades of life. It exacts highest toll in the very young and the elderly. Cholecystitis in infants and children is almost invariably associated with a bacteremia.

The primary site of the infection may be any place within the body, e.g., middle ear infections, pneumonia and intra-abdominal abscesses, such as those resulting from appendicitis. Typhoid fever, now uncommon, illustrates the mechanism whereby infection causes biliary tract disease, as an acute cholecystitis. If the attack subsides and the gallbladder remains, there may be persistence of typhoid bacilli in the bile throughout life without causing symptoms, as was the case in "Typhoid Mary." The bacteremia increases the organisms to such numbers in the bile that as they are concentrated in the gallbladder, the organisms are not overcome by the ordinary bactericidal properties of the bile. Invasion of the gallbladder mucosa results in a flagrant infection with impairment of the blood flow to produce an ischemia and, sometimes, necrosis with gangrene. Even cholecystectomy under these circumstances for the acalculous acute cholecystitis may be followed by a persistent residuum of typhoid bacilli throughout the biliary tract.

Calculous biliary tract disease in the very young is infrequent, occurring chiefly in those with hemolytic anemia. Occasional case reports of infants and children with biliary calculi associated with metabolic disorders have been reported in recent years.

Another and, indeed, spectacular example of infection that may occur without calculi is "pneumocholecystitis." Although acute emphysematous cholecystitis was described by Lobingier in 1908, relatively few patients have been reported when one recognizes that calculous biliary tract disease is the condition for which abdominal operations are most frequently done. Some 150 cases have been reported. Although cultures are often negative, it is believed to be caused by microorganisms capable of gas production. Amongst 1,389 patients operated on for acute cholecystitis, we have encountered this condition only four times. In one of these, the findings at operation were subsiding acute cholecystitis with a pneumocholecystitis (Fig. 3). Clostridia organisms were found. The patient had an uneventful recovery. When seen one and one half years later, he was doing well.

Diverticula of the ductal system, intra- or extrahepatic, may become a "focus" for bacterial growth that extends to produce a cholangitis. Duodenal diverticula which originate at or adjacent to the ampulla of Vater may be the site of infection. This may extend into the biliary ductal system and, with obstruction, cause a bacteremia most often of gram-negative organisms.

Ecchinococcus Cyst: Hepatic abscesses secondary to ecchinococcus infection may rupture into the intrahepatic biliary ductal system and be the cause of cholangitis and jaundice. The slide illustrates an ecchinococcus cyst and abscess that ruptured into the left major hepatic duct. Daughter cysts passed into the common bile duct to cause obstruction.

One of the complications of peptic ulcer is the formation of a fistula between the ulcer bearing segment of the gastrointestinal tract and the common bile duct. Ascending infection may cause symptoms referable to the liver.

An example of a choledochoduodenal fistula is demonstrated by a gastrointestinal series. Opaque material outlines the fistula and common bile duct. Air is present in the intrahepatic ductal system.

Extrahepatic infections of an extensive nature with a bacteremia are a cause of clinical jaundice. Diagnosis may be difficult. Vermillion and his associates at the Mayo Clinic reported seven

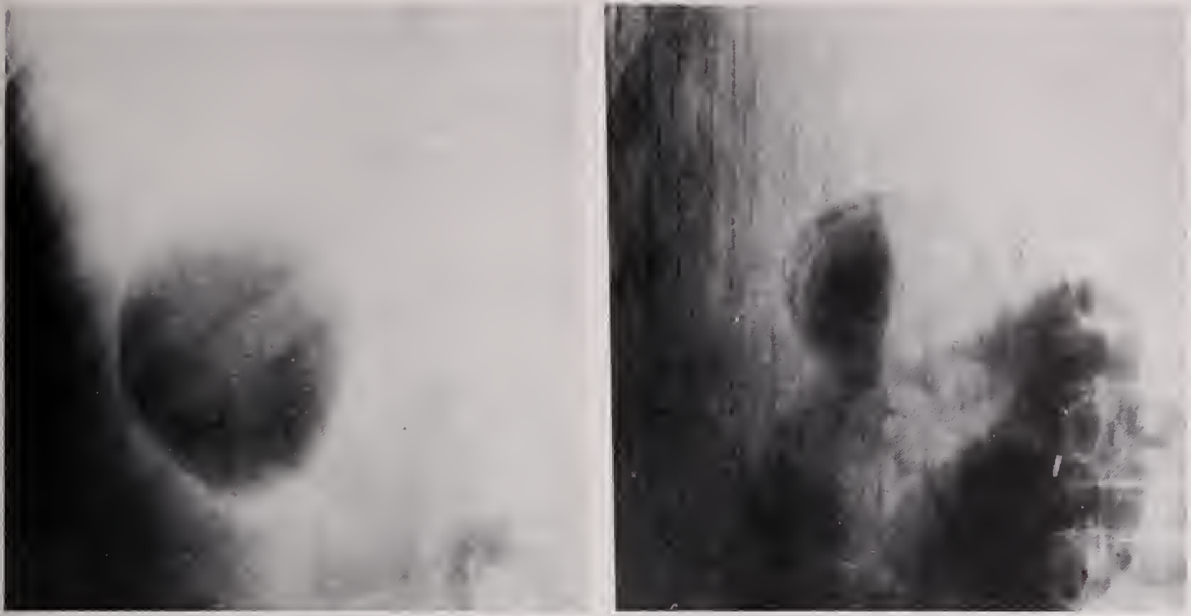

Fig. 3 Infection: Pneumocholecystitis without calculi. Gas producing organisms were cultured.

patients with jaundice due to an overwhelming infection. Three had peritonitis, two had advanced blood dyscrasias, one had a bacterial endocarditis and one had a leukemic infiltration of the liver and changes attributed to mercaptopurine therapy.

The predominant bacteria identified by blood culture were (1) Bacteroides, (2) Streptococcus (anaerobic), (3) Staphylococcus aureus, (4) Streptococcus (anaerobic), (5) Pseudomonas, (6) Pseudomonas and (7) Staphylococcus aureus.

Their observations are specific:

> "Bacteremia was due to various gram-positive and gram-negative organisms, one patient having mixed flora. Pathologic hepatic changes were principally those of cholestasis, Kupffer cell hyperplasia, fatty metamorphosis, and focal necrosis of parenchymal cells; in most patients, these changes were thought to represent nonspecific reactive hepatitis. In all patients, autopsy or surgical exploration demonstrated a normal biliary tract with no gross pathologic process involving the liver. Six of the seven died of the underlying illness and associated bacteremia. In the one survivor, the results of hepatic function tests became normal."

The clinician should be alert to diagnose and establish the cause of jaundice.

Cholangitis is a common accompaniment of infection within the biliary ductal system. For the simple cholangitis, the following three manifestations are criteria for the diagnosis:

(1) The wall of the duct is thickened.
(2) There is an infiltration of the polymorphonuclear leucocytes into the paraductal tissues.
(3) The cellular anatomy is less distinct than in the normal, being described as "cloudy swelling."

In addition to these changes, bile stasis with pigmentation is not infrequent.

Cholangitis is an infection of the biliary ductal system. Involvement of the intrahepatic portion including the small ramifications, the canaliculi, also involves the adjacent liver cells. Acute cholangitis of short duration may subside with little residual effect upon the liver tissue. This low power photomicrograph demonstrates intense infiltration of the centrally located portal area with polymorphonuclear leucocytes. Note that the leucocytes have infiltrated the portal bile ducts and the surrounding portal connective tissue as well. There is but little bile retention, however, and no demonstrable hepato-cellular necrosis or hepatic cirrhosis.

Obstruction and Infection

The terms "acute" and "chronic" cholecystitis are indicative of the nature of the inflammatory reaction present rather than the stage of the disease. The gallbladder that has contained calculi for a short time usually functions well, whereas function is poor when calculi have long been present. Impairment of function as demonstrated by cholecystography is relatively readily correlated with the degree of disease in the gallbladder wall. Some of the reaction and scarring, if not most of it, is the result of bacterial injury. If there have been episodes with ascending infection via the lymphatics, then a low grade cholangitis may be present. Bacteria in the bile as secreted by the cells of the liver into the canaliculi probably plays a minor role in early calculous disease whereas the bacteria within the wall of the gallbladder and bile ducts plays a major role. One may readily imagine that such an established infection may "flare up" when the protective mechanisms against these bacteria are reduced or when local conditions change. Distention of the gallbladder or ductal system or both by whatever cause may result in circumstances favorable to bacterial growth. Such increased growth in the canaliculi becomes a source of organisms to be poured back into the blood stream and, at the same time, prevent bile from being received from the liver cells, thus producing jaundice of varying degree as well as a bacteremia.

Acute Calculous Cholecysitis: The normal bacterial flora of the bile of individuals in good health may vary from individual to individual. Bile is bacteriocidal for many of these. The gram-negative organisms are the most numerous. When calculi form in the gallbladder, they probably have little effect upon the bacterial flora. However when the calculi obstruct the flow of bile into or outflow of the gallbladder or both, stasis results. Under these circumstances, the bacteria rapidly increase in number. A gallbladder outlet obstructed by a calculus attempts to overcome the obstruction by increasing the pressure within it. This causes pain and, at the same time, tends to force the bacteria into the interstices of the gallbladder wall, the Rokitansky-Aschoff sinuses, where they produce a cellulitis and intramural abscesses. This is infection in the true sense of the word precipitated by obstruction that leads to stasis of bile in the gallbladder. Infection, thus once established, extends into the lymphatics of the ductal system, both intra- and extrahepatic. To what extent infection persists after such an episode is conjectural. Recurrent episodes may be expected. There is little doubt that even after removal of an acutely inflamed gallbladder containing calculi, episodes of cholangitis may occur. In the young, with gallstones of short-standing, this is less frequent than in the older individual in whom calculous disease has long been present.

The role of obstruction and infection in acute cholecystitis is well presented in a recent study of 28 cases by J. F. Watson. Obstruction is held to be the more frequent primary cause of acute cholecystitis. In the elderly and debilitated, infection is secondary. However, infection and obstruction account for the morbidity of serious complications and the majority of the deaths.

Choledocholithiasis—Acute Obstructive Suppurative Cholangitis: Chronic cholecystitis, as mentioned above, is associated with calculi in most instances. The duration of the disease, the robustness of the patient or individual, whether or not the calculi are increasing in number or size or both, determines to a large extent whether the bacterial infection in the biliary tract remains relatively quiescent or tends to exacerbate from time to time.

Dow and Lindenauer at the University of Michigan Medical Center in Ann Arbor reviewed the reports on acute suppurative cholangitis in 1969 adding their own experience of ten patients. Running through this report is emphasis upon the parallelism of the experience of the various clinics, namely, biliary tract disease of long-standing is usually in the individuals of the older age group, although there were a few cases in patients under 50. The mechanism of common duct obstruction resulted in a septicemia of a rather specific pattern. They exhibited hypotension, mental obtundation, septicemia due to gram-negative organisms. The prognosis is grave. Operation is mandatory. Decompression which is accomplished by a procedure that is within the patient's capacity offers the most.

Note that the use of antibiotics prior to operation, in my opinion, is mandatory. The reason for this statement is the high incidence of the organisms in the blood stream in large numbers and, second, that any surgical procedure is likely to increase the bacteremia. It is probable, also, that the bacteremia is the cause of the manifestations of the infection rather than the growth of the organisms within the liver itself. In other words, the problem lies with the bacteria in the blood stream rather than the bacteria that are limited to the liver and ductal system. The obstruction results in the rapid pouring forth of these organisms into the circulation. On the basis of this concept, one may hypothecate that an elderly person, who has tolerated calculi and infection within the biliary system for many years, may suddenly become devastated when a calculus in the common duct suddenly occludes the flow of bile and infection becomes uncontrolled. The presence of many organisms, stasis, a lack of protection against the bacterial toxins set the stage for flagrant bacterial growth. The nature of the organisms vary greatly. At Duke University, bacteriological studies of bile obtained by percutaneous transhepatic aspiration illustrated 64% of 70 patients with intrinsic obstruction due to ordinary biliary tract disease. Colon bacilli were the predominating organisms. They emphasize that whereas 64% of patients with obstruction gave positive bile cultures, only 10% of patients with complete obstruction secondary to carcinoma of the pancreas or ampulla of Vater gave positive cultures. They pointed out that an unknown percentage of patients with chronic gallbladder disease have clostridia in the gallbladder wall. However, only rare instances of clostridia gas gangrene follow operations on the gallbladder. The gram-negative group, as they flourish, produce an overwhelming toxic material within the ductal system that is passed into the circulation producing shock. The organisms from the large bowel, the colon, reach the liver, for the most part, through the portal circulation and in large numbers. The septicemia that these produce account for a considerable proportion of the deaths due to biliary tract disease. So rapid may be the development of this process that death may occur before it is recognized and indicated therapy instituted. This is illustrated by the findings at operation in an elderly man with acute obstructive suppurative cholangitis. The contracted, thick-walled gallbladder contained calculi. Choledocholithiasis caused complete common duct obstruction. A bacteremia ensued.

The combination of obstruction and infection are more frequently the cause of biliary enteric fistulae than infection alone. In a sense, they represent a favorable outcome of acute cholecystitis with impaired integrity of the gallbladder wall that might have resulted in a fatal bile peritonitis. Cholecystoduodenal fistulae are the most common followed by cholecysto-colonic in incidence. Communications between the gallbladder and stomach are rare.

An example of an unusual situation is presented on the slide, an instance of cutaneous-cholecysto-colonic fistula. Infection and obstruction account for its persistence.

The end result of long-standing obstruction and infection of the ductal system is evident in the slide. Intrahepatic calculi and cholangitis first impair liver function, then cause loss of substance in some segments with biliary cirrhosis in others. Regeneration of liver tissue is minimal because of the persistence of obstruction and infection. The autopsy specimen attest to the lethal effect of these factors in biliary tract disease (Fig. 4).

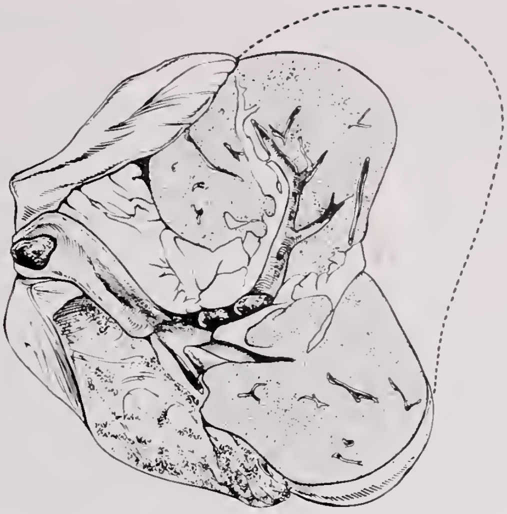

Fig. 4 Obstruction and Infection: End result of long-standing obstruction and infection. Calculi in the intrahepatic ductal system and advanced cirrhosis led to liver failure and death.

Prolonged obstruction and infection of the biliary ductal system leads to an intense change in the liver tissue about the canaliculi. There is a marked increase in the fibroplastic tissue and collagen material in this area. In addition, there may be all degrees of inflammatory reaction from that of a simple cholangitis to a true hepatitis and even miliary abscess formation. In the wake of these, scarring and cirrhosis follow. There is a marked loss in the normal architecture of liver tissue. Liver regeneration is often present, particularly if the process has been of long-standing.

Chronic Cholestasis With Early Hepatic Cirrhosis: In contrast to the photomicrograph of acute cholangitis, the hepatic parenchyma is divided by linear bands of connective tissue which extend between portal areas. Other significant differences are that in chronic cholestasis intercanicular bile, retention is quite apparent and that the inflammatory infiltrate which is composed of lymphocytes and plasma cells is not confined to the portal areas but extends out along the cirrhotic bands of connective tissue as well.

Discussion

Separately, the role of obstruction and infection may be observed by the study of selected cases. From a practical standpoint, the two occur together as a general rule. Either may precede the other in the beginning of the disease and, in that sense, be considered an etiological factor. Once established for long, obstruction and infection appear to vie with one another in furthering the advance of the disease.

Obstruction without infection manifests itself in two ways. First and most obvious is jaundice. If the onset of obstruction is sudden and if it is complete, jaundice quickly becomes intense. If the obstruction is only partial and gradually increases, then the jaundice is insidious and may escape notice for considerable time. Second is the matter of pain. Sudden occlusion of the common duct by a calculus is evidenced by pain in the right upper quadrant and mid-epigastrium that radiates through to the back and scapular area. Unrelieved, complete obstruction results in jaundice that is apparent within 12 hours. If the obstruction is incomplete, such as takes place when a tumor arising within the common duct is the cause, pain may be minimal or absent even when the obstruction becomes complete. Pain followed by jaundice indicates sudden and marked obstruction. The matter of diagnosis is not difficult whereas jaundice that has been gradual in onset but progressive with little or no pain requires the consideration of many possibilities.

The microscopic picture of a liver biopsy in the patient with obstruction without infection ranges from canicular distention with increased bile pigment in the liver cells to the extensive scarring of biliary cirrhosis.

The effects of infection are more numerous, more variable and less predictable than those of obstruction. The bacterial flora of bile in a state of health differs from one individual to another. Actual bacterial counts may be low or high without infection. In the presence of calculi and the injury they may produce to the mucosal surface of the biliary tract and obstruction to the flow of bile, bacteria increase to cause "infection." The microscopic changes due to infection depend upon the extent and duration of the process. Acute cholangitis of short duration subsides with little residual effect upon the liver tissue. If persistent or recurrent with flagrant exacerbations of a virulent nature, liver damage is great and scarring, cirrhosis, with reduced liver function results. Individuals in the robust period of life appear to be less susceptible to such infections than those at the extremes of life. Amongst infants, young children and the elderly, debilitating infections within the biliary tract tend to progress and extend rapidly. In the very young, the infection usually reaches the biliary tract from some focus elsewhere in the body. Such flagrant infections are today rarely fatal, being controlled by antibiotics and support of the body's protective mechanisms. In the elderly, a long existing bacterial flora in the bile of organisms from the intestinal tract may suddenly assume exuberant growth and cause a gram-negative septicemia, one of the more common causes of death in elderly patients with long-standing calculous biliary tract disease.

In the broad sense, the treatment of biliary tract disease consists in the prevention and control of the two principal forces that cause disability and curtail life. Essentially, these are obstruction and infection in the biliary ductal system. Because calculi so often precede these, the prevention of calculi would seem to be the ideal approach. The accomplishment of this objective remains for some time in the future. Thus for the present, we are limited to the prevention and control of the complications that are due to obstruction and infection. The initial phase of the disease is calculi in the gallbladder, cholelithiasis. The early recognition of their presence and the undelayed removal of the gallbladder is the most effectual means to this end at present. This has been well-established and is widely documented in the medical literature. It also is well known that the clinical course of a patient with cholelithiasis is unpredictable. Autopsy studies have demonstrated that many individuals have gallstones whose histories do not indicate that they have ever caused symptoms and whose liver exhibits no demonstrable pathologic changes that can be attributed to them. Upon these observations, there are many physicians who advocate ignoring cholelithiasis unless they cause disability. Such a policy is extended to withhold operation unless these disabilities are intolerable or constitute an immediate threat to life.

The accumulated experience of representative surgical clinics in North America, as well as those of many countries throughout the world, provide a considerable evidence that early sur-

(Continued on page 178)

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Muscles
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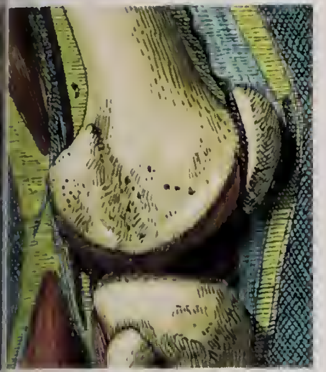

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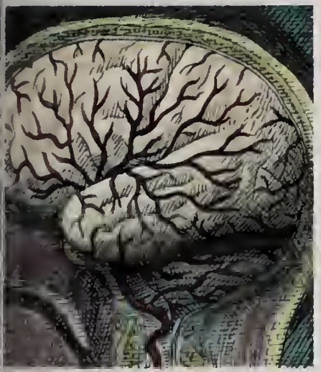

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BUFORD T. CASEBOLT, M.D., ***Kansas City***

Duplication of the Common Bile Duct

Case Report

This case report of duplication of the common bile duct depicts the embryological basis for the abnormality. The author also includes a review of the literature. Doctor Casebolt is in the private practice of surgery.

ANOMALOUS ANATOMIC RELATIONSHIPS are found frequently in the extrahepatic ductal system and associated hepatic and cystic arteries. Text books of anatomy are misleading, suggesting constancy of anatomy in this area. Eisendrath[1] reported anomalous bile ducts in 8% of the series of necropsies; Michels[2] found accessory ducts in 18% of 200 specimens. Abnormal course of the cystic duct is a common occurrence and is reported by Flint[3] to exist in 15% of his series of 200 cases. Thompson[4] found a similar abnormal course in the cystic duct in 23% of 421 specimens. The incidence of significant deviation from normal anatomy could be estimated at 30%.

The frequency of procedures involving the gallbladder and bile ducts requires the surgeon to be familiar with abnormal anatomy. Failure to recognize unusual anatomic relationships at operation could result in surgical injury to the vital structures encountered when performing cholecystectomy and common duct exploration.

Duplication of the common bile duct is one of the rare abnormalities of the extra-hepatic ductal system. Duplication of the common bile duct, like other anomalies, has an embryological basis, which will be reviewed.

CASE REPORT

The patient was a 69-year-old white woman who was admitted to the hospital with a history of chills, fever and vomiting of several weeks' duration. The patient denied abdominal pain. She acknowledged pain localized to the inferior angle of the right scapula. While hospitalized, a spiking fever was evident. Initial investigation revealed a number of problems. Auricular fibrillation was converted to a sinus rhythm with digitalis; chronic pulmonary emphysema, chronic bronchitis and pulmonary fibrosis were detected; and a severe anemia was identified. An upper gastrointestinal series was normal. A needle biopsy of the liver showed slight focal, chronic hepatitis. Several urinalyses revealed pyuria. Urine cultures revealed miscellaneous organisms, with an organism count less than 10,000 per cu mm. An intravenous pyelogram failed to reveal obstructive uropathy to account for the patient's suspected sepsis. A cholecystogram revealed a nonfunctioning gallbladder. An intravenous cholangiogram revealed a dilated common bile duct with several filling defects indicative of common duct stones. An SMA-12 determination revealed the serum albumin to be only 2 gm/100 ml, and there was slight elevation of the alkaline phosphatase.

The patient was treated with antibiotics to which she slowly responded with subsidence of fever and leukocytosis. Slight tenderness became apparent in the right upper quadrant of the abdomen. It seemed increasingly evident that the cause of the patient's suspected sepsis was cholangitis due to common duct stones.

At surgery, the patient had multiple stones in her gallbladder. The gallbladder wall was thickened and subacutely inflamed. The spleen was five to six times enlarged and estimated to weigh 600 gm to 800 gm. The common bile duct was filled with stones and its wall felt thickened. A cholecystectomy was first performed. A cystic duct cholangiogram (Fig. 1) confirmed the presence of common duct stones. A choledochotomy was performed, and multiple stones were extracted from the common bile duct. When the opened common bile duct with the stones removed was viewed from within, there appeared to be a posterior diverticulum, which also contained stones. The stones filling this diverticulum were removed with difficulty. The exact nature and full extent of this anatomical abnormality could not be appreciated at the time of surgery by intraoperative cholangiography because of superimposition of the common bile duct and the "diverticulum." An intraoperative post-common-duct exploration T-tube cholangiogram (Fig. 2) revealed no further stones. A liver biopsy was performed.

Postoperatively, the pathologist reported chronic cholecystitis with cholelithiasis. There was polyarteritis involving the wall of the gallbladder, which was described as striking. The liver biopsy showed slight chronic hepatitis. The common duct stones were noted.

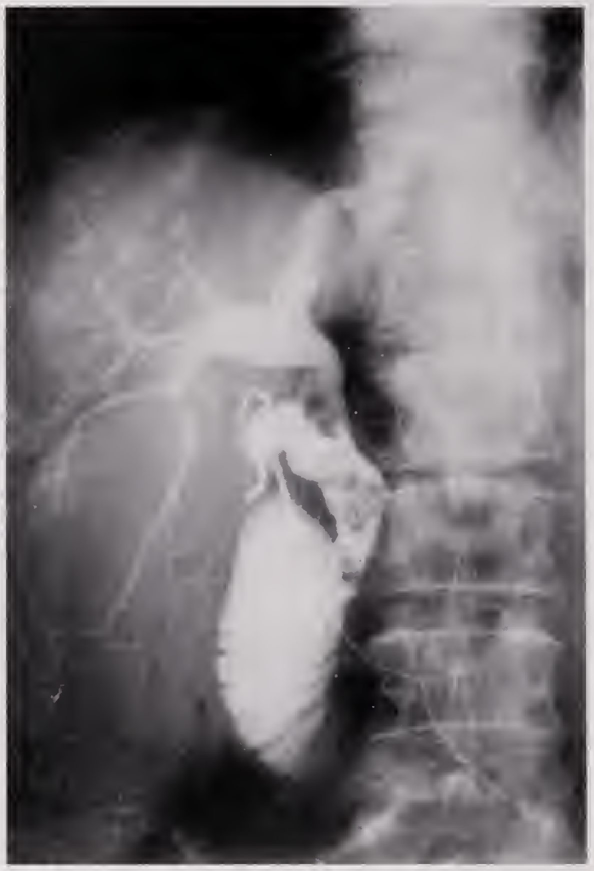

Fig. 1 Precommon duct exploration intraoperative cystic duct cholangiogram. The common duct duplication was not evident at this time since the two ducts were superimposed. However, stones in both ducts are apparent.

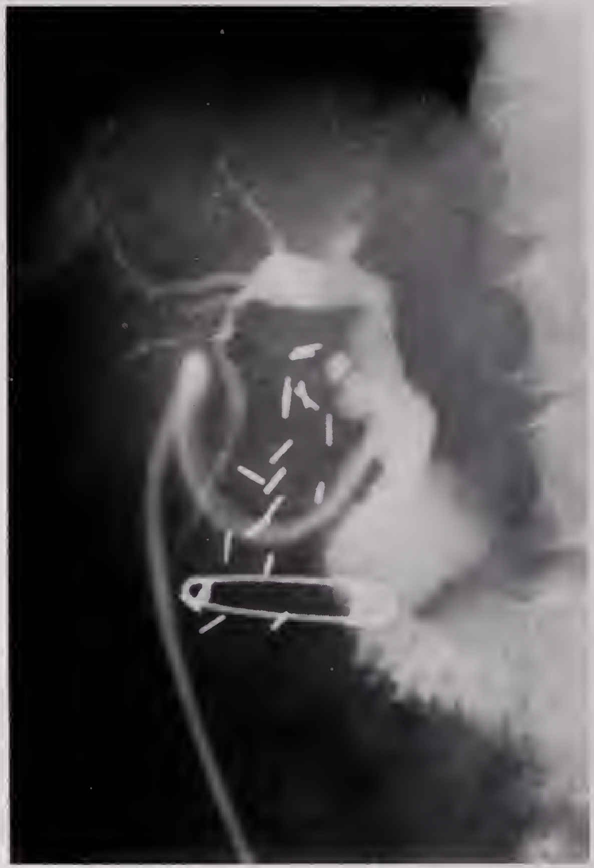

Fig. 2 Intraoperative T-tube cholangiogram following exploration of the common bile duct revealing no further stones.

The patient continued to have a low grade fever and exhibited leukocytosis on an obscure basis. Postoperative antibiotics were administered. The first T-tube cholangiograms were obtained on the eighth postoperative day. These failed to rule out residual stones. Oblique and lateral views revealed duplication of the common bile duct (Fig. 3), rather than the previously suspected diverticulum. The artist's concept of the abnormal anatomy (Fig. 4) is based on intraoperative recollections and the postoperative cholangiogram. Two additional later T-tube cholangiograms revealed no residual stones. The T-tube was removed on the 22nd postoperative day without sequella.

After postoperative antibiotics failed to control low grade fever and leukocytosis, the patient was started on a regimen of corticoids as definitive treatment for polyarteritis. She exhibited a symptomatic response with diminution of the low grade temperature elevation and a reversion of leukocytosis to normal. The patient was somewhat improved and dismissed from the hospital on the 26th postoperative day.

The patient has not done well following hospital dismissal. A low grade fever persists. Anorexia continues and arthralgia is present. There has been no weight gain and the patient appears cachectic. It is the general belief of her physicians that she has progressive, widely-disseminated polyarteritis, which probably has a poor prognosis. Larger dosages of corticoids are currently being employed in an attempt to produce a remission.

Discussion

In reviewing the case presentation, it is apparent that the patient was fortunate to have had all stones removed from both ducts. This is particularly true in view of the limited access to the more posterior of the two ducts and in view of the initially misunderstood abnormal anatomy.

It also is apparent that this patient's bile duct problem may not be completely solved. Bile stasis will occur in the more posterior of the two bile ducts, which could lead to formation of additional common duct stones. This is especially true since the upper portion of the more posterior duct is a blind stump (Fig. 3). It was here that the cystic duct was tied and divided at what

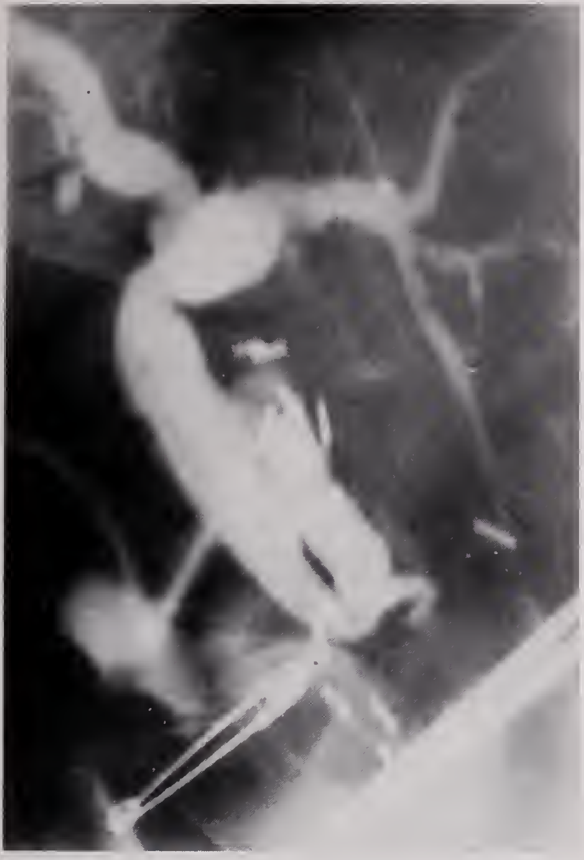

Fig. 3 Oblique postoperative T-tube cholangiogram revealing duplication of the common bile duct. Note the communication between the two ducts.

was believed to be its junction with the common bile duct.

On a hypothetical basis, it is interesting to speculate about what could be done in the future should additional common duct stones develop in this patient. One good solution might be to divide the common hepatic duct as low as possible, anastomosing it to the duodenum. This procedure might have been done initially had the abnormal anatomy been thoroughly understood.

From the practical point of view, it seems doubtful that this patient's longevity will be sufficient to permit development of stone formation because of her disseminated polyarteritis.

It appears increasingly apparent that most of this patient's past and present problems are best accounted for by disseminated polyarteritis rather than common duct stones and cholangitis.

Embryology of Biliary Duct System

In the two-week-old human embryo (2.5 mm), the hepatic diverticulum is a median ventral outgrowth of the entodermal tube. By five weeks of age (4.5 mm), the hepatic diverticulum, which at first is a hollow cul de sac-like protrusion, divides into a cranial or pars hepatica portion and a caudal or pars cystica portion (Fig. 5).[5] The cranial portion is the anlage of the epithelial lining of the right, left and common hepatic ducts and intrahepatic ducts. The caudal portion is the precursor of the epithelial lining of the gallbladder, the common bile duct and the cystic duct. The common bile duct is of short length in comparison to the other portions of the ductal system in the five-week embryo (Fig. 5).

The gallbladder, the common bile duct, and the cystic duct are originally solid cords of cells without lumina. The common bile duct has a lumen in the 7.5 mm embryo. The lumen of the cystic duct develops by the time the embryo reaches 16 mm. A clear cut lumen of the gallbladder begins to appear in the 18 mm embryo. Development of the gallbladder wall with mucosa and muscularis does not occur until the embryo reaches 29 mm in length. Viewing Ludwig's sketch[5] (Fig. 5), it is easy to appreciate how a number of different types of duplication of the common bile duct could evolve.

Embryologically stated, this case of common duct duplication evolved as a result of the fol-

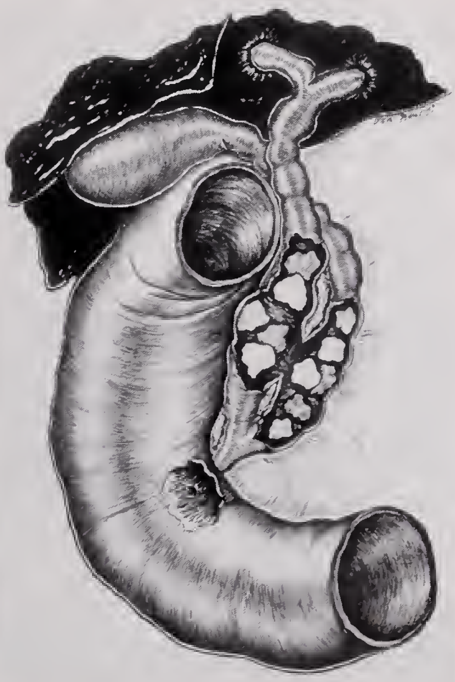

Fig. 4 Artist's concept of the duplication of the common bile duct in the case report. This concept is based upon intraoperative recollection and postoperative cholangiograms.

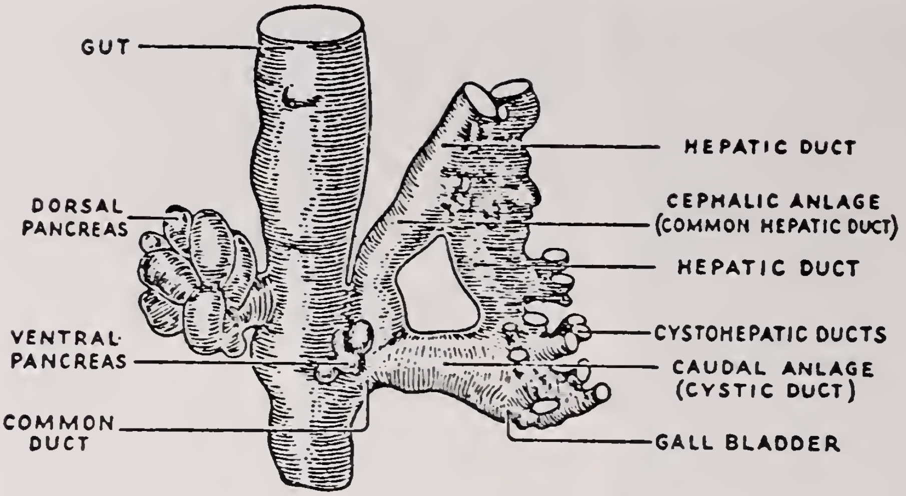
GUT
DORSAL PANCREAS
VENTRAL PANCREAS
COMMON DUCT
HEPATIC DUCT
CEPHALIC ANLAGE (COMMON HEPATIC DUCT)
HEPATIC DUCT
CYSTOHEPATIC DUCTS
CAUDAL ANLAGE (CYSTIC DUCT)
GALL BLADDER

Fig. 5 Sketch (after Ludwig) of the fore-gut showing the hepatic diverticulum differentiating into the cephalic and caudal anlage. Note that the portion destined to become the common bile duct is markedly shortened in comparison to the other developing portions of the ductal system.

lowing: an incomplete division of the pars cystica and pars hepatica; a failure of growth at the root of the hepatic diverticulum, destined to become the common bile duct; and excessive growth of the pars hepatica and pars cystica portions, destined to become the common hepatic and cystic ducts.

Review of Literature

Duplication of the common bile duct or double drainage is a rare abnormality. Only a few cases have been reported in the world literature. Boyden[6] in 1933 collected 19 case reports of congenital doubling of the common bile duct from the world medical literature, dating back as far as the 1500s. Five of these cases had abnormal enteric insertions. Mentzer[7] cited similarities between the anatomy of fish, birds and reptiles and the cases of duplication of the common bile duct collected by Boyden.[6]

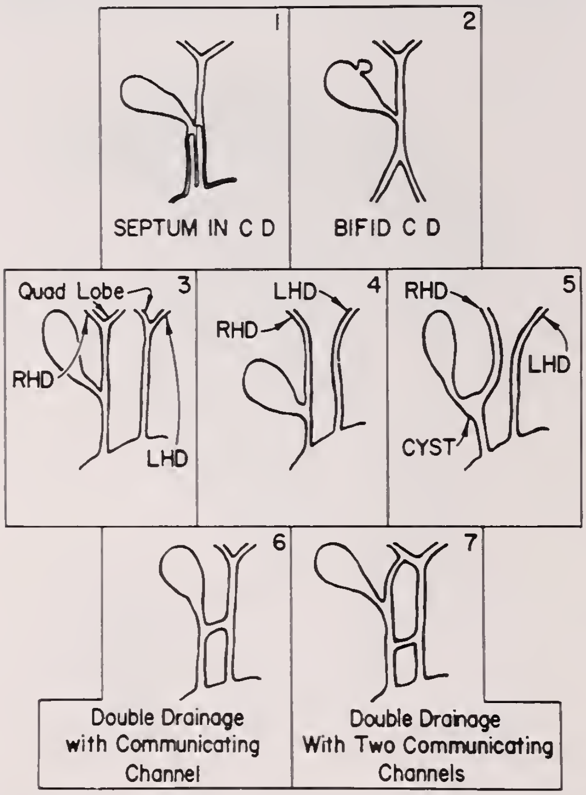
1
SEPTUM IN C D
2
BIFID C D
Quad Lobe
3
RHD
LHD
LHD
4
RHD
RHD
5
LHD
CYST
6
Double Drainage with Communicating Channel
7
Double Drainage With Two Communicating Channels

Fig. 6 Diagrammatic summation of the cases of duplication of the common bile duct reported in the world literature (after Goor and Ebert).

A diagrammatic summation (Fig. 6) of all reported cases of duplication of the common bile duct has been compiled by Goor and Ebert.[8] These authors divided the reported cases into four main groups: septum in the common duct (Fig. F-1); bifid common duct (Fig. F-2); conditions in which the left lobe of the liver drains into the pyloris or duodenum via one duct and the right lobe drains via another duct (Figs. F-3, F-4B, F-5); and conditions in which both right and left hepatic ducts drain through a common hepatic duct into the duodenum. The gallbladder drains separately into the duodenum through a cystic duct. A communicating duct or ducts join this double drainage arrangement (Figs. F-6 and F-7).

The case reported represents a combination of a septum in the common duct and a communicating channel between the two ducts (Figs. F-1 & F-6).

Summary

A case of duplication of the common bile duct has been presented. An artist's concept of the abnormal anatomy with reproductions of cholangiograms document the presentation.

The embryologic basis for this rare abnormal-

(Continued on page 178)

CARL H. IDE, M.D., J. MARSHALL JUNG, M.D.,
NABIL I. JARUDI, M.D. *and* WILLIAM M. HART, M.D., Ph.D., *Columbia*

Unilateral Exophthalmos

The diversity of the etiology of unilateral exophthalmos presents a diagnostic challenge requiring multidisciplinary evaluation. It not only involves the ophthalmologist, but may require the attention of the radiologist and internist, the pediatrician, the generalist, the otolaryngologist and, on occasion, the neurosurgeon. The authors report a representative survey of patients with this condition who have been examined in the past ten years. Doctor Ide is Professor of Ophthalmology and Doctor Hart is Professor and Chairman of the Department of Ophthalmology, University of Missouri. Doctor Jung, former Chief Resident Physician, is now in private practice in Cape Girardeau. Doctor Jarudi, former Chief Resident Physician, is now in private practice in Beirut, Lebanon.

In every patient with unilateral exophthalmos, it is mandatory to differentiate true exophthalmos from pseudoexophthalmos, a condition seen in patients with unilateral high myopia, unilateral buphthalmos, unilateral retraction of the upper lid and congenital or traumatic asymmetry of the orbit.[1]

Definition and Measurement of Exophthalmos

Unilateral exophthalmos may be defined as the protrusion of one globe and is synonymous with proptosis. It may be best appreciated by viewing the eyes from above and behind the patient. Several devices are available for objective measurement of exophthalmos. The most commonly used instrument is, perhaps, the Hertel exophthalmometer.[2] It consists of a calibrated guide bar, which is placed horizontally in front of the patient's eyes, and a carrier at each end of the bar. The carrier has a sliding sleeve which contains a reflecting 45-degree prism and is notched to fit the temporal margin of the orbit. The distance between the temporal margin of the orbit and the apex of the cornea viewed from the side is measured. A difference of 2.5 mm or greater between the eyes is significant.[3]

History

The history may reveal the etiology. When did the proptosis first become noticeable? How fast is it developing? A sudden onset of unilateral exophthalmos usually indicates an inflammatory process (Fig. 1), while an insidious onset may indicate a neoplasm (Fig. 2). A history of trauma makes one consider an arteriovenous fistula with its associated bruit and pulsation (Fig. 3). Double vision may be the initial symptom prior to the actual development of gross proptosis. Another initial symptom may be the

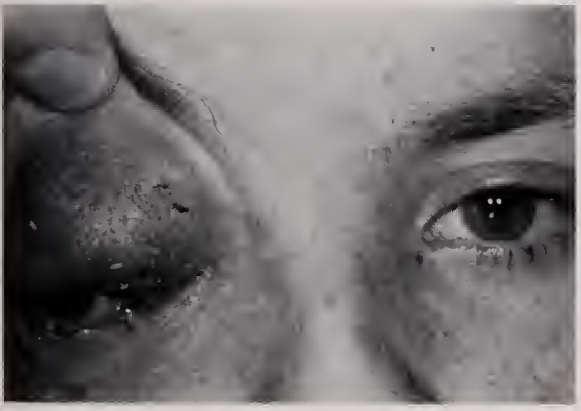

Fig. 1 Orbital cellulitis causing exophthalmos on the right side with downward displacement of the globe.

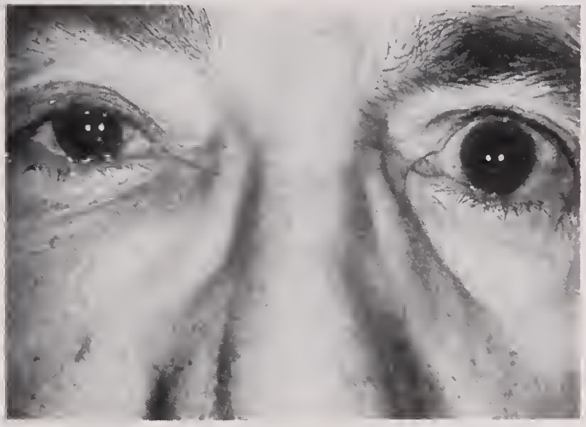

Fig. 2 Right exophthalmos due to a malignant lymphoma of the maxillary sinus with tumor extension into the orbit.

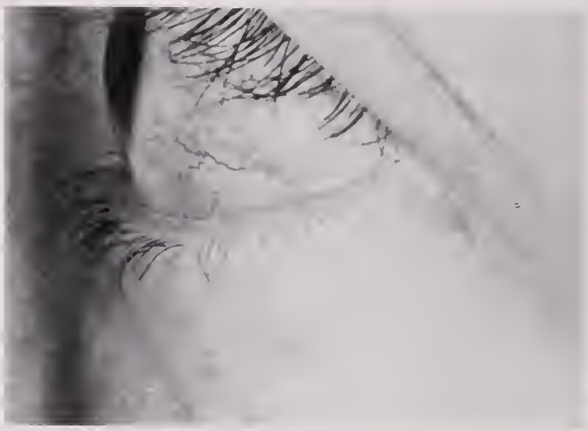

Fig. 3 Exophthalmos and prominent conjunctival vessels in a patient with arterio-venous malformation in the left orbit.

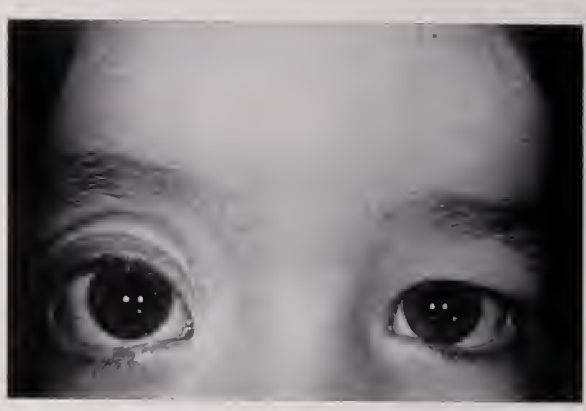

Fig. 4 Hemangioma in the right orbit causing marked exophthalmos.

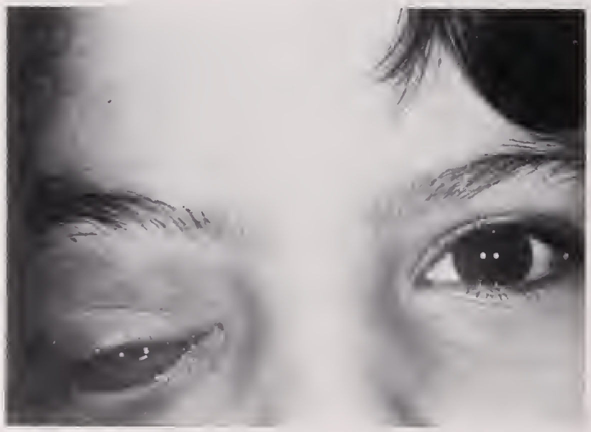

Fig. 5 Swelling of right upper lid and forward and downward displacement of the globe in a patient with orbital rhabdomyosarcoma.

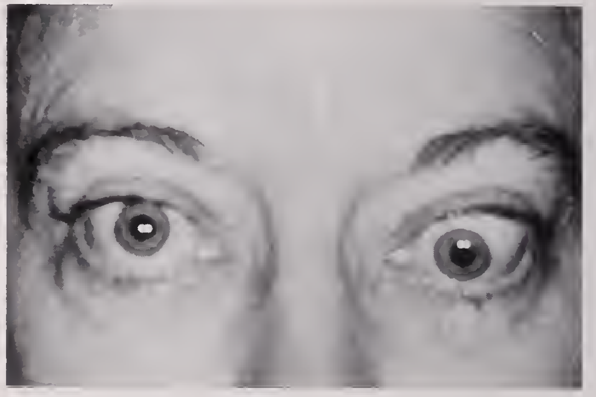

Fig. 6 Left exophthalmos and paralysis of left superior rectus muscle in a patient with thyroid disease.

rubbing of lashes against the spectacle lens.

Some orbital tumors are a frequent cause of exophthalmos in a certain age group but are extremely rare in another. Hemangiomas are the most common of all orbital tumors and usually occur in childhood or early adult life (Fig. 4).[4] A rhabdomyosarcoma is the most frequent malignant orbital neoplasm in childhood. It may tend to bleed easily and follow a rapidly progressive course as in the case of the girl who presented with ecchymosis and proptosis of the right eye (Fig. 5).

Complaints of nasal discharge, chronic sinusitis or previous sinus surgery may be elicited in patients with an orbital mucocele. The accessory sinuses of the nose surround the orbit, being separated from it by thin bony walls. If an orifice connecting a sinus with the nose becomes occluded, the sinus will become distended with fluid (mucocele). A mucocele of the frontal or ethmoidal sinus may cause swelling of the upper and nasal part of the orbit with proptosis of the globe downward and laterally.

Careful questioning for symptoms of hyperthyroidism is pertinent in every case of unilateral exophthalmos. Endocrine disorder secondary to a dysfunction of the thyroid-pituitary axis is a frequent cause of unilateral exopthalmos. One patient with unilateral exophthalmos revealed lid retraction, lid lag, diplopia, restricted ocular motility and positive thyroid function tests (Fig. 6).

PHYSICAL EXAMINATION

A complete ophthalmological examination must be performed. After recording the visual acuity, the first consideration is the measurement of the degree of exophthalmos. The direction of displacement of the globe may help in determining the location of the pathology. Depending upon the site of a tumor, the globe may be displaced upwards, downwards, laterally or nasally as well as anteriorly. A tumor in the muscle cone also may cause pressure on the optic nerve or increased venous pressure which leads to papilledema, visual field defects and optic atrophy.

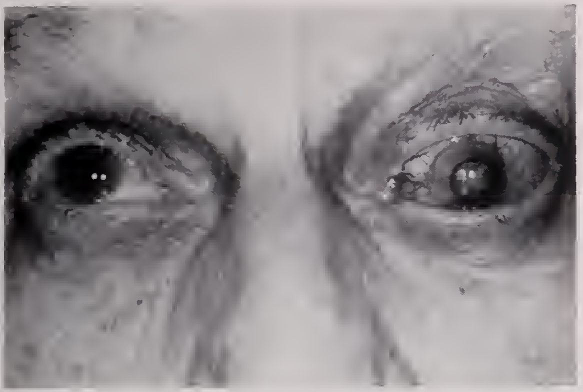

Fig. 7 Malignant melanoma of the orbit, originating in the choroid causing forward and downward displacement of the left eye.

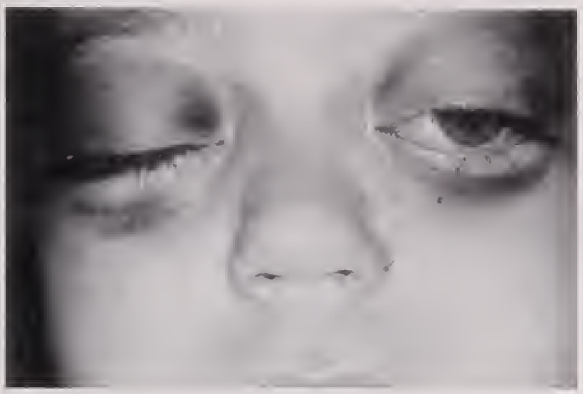

Fig. 8 Metastatic neuroblastoma in the left orbit.

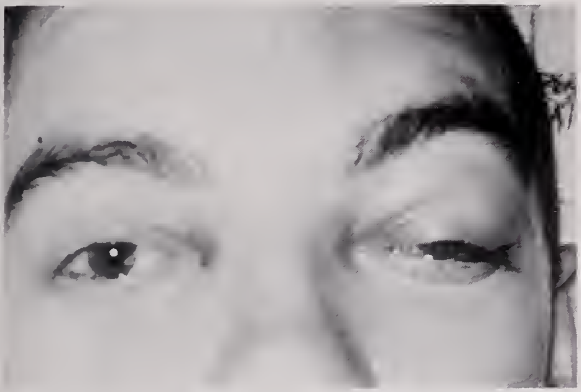

Fig. 9 Left cavernous sinus thrombosis causing exophthalmos.

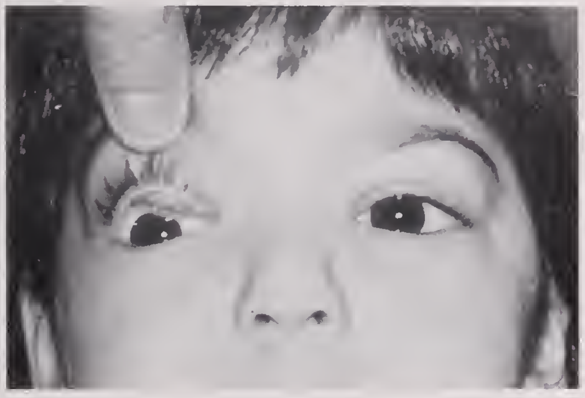

Fig. 10 Right exophthalmos in a patient with acute leukemia.

Folds in the retina may indicate pressure on the posterior part of the globe. An intraocular tumor, a malignant melanoma of the choroid extending into the orbit, was the cause of exophthalmos in this patient (Fig. 7). There was no light perception in the left eye. Examination showed forward and downward displacement of the left globe with marked limitation of its motility. The conjunctival and episcleral vessels were moderately engorged. Hyphema, rubeosis iridis and a mature cataract were evident. Ocular tension was three times as high as the normal value.

Systemic Evaluation

A complete systemic evaluation should include a consultation with the internist when endocrine, hematological, neoplastic or neurological disease is suspected. In children (Fig. 8), neuroblastoma tumor is frequently metastatic to the orbit.[5] Periorbital ecchymoses usually precede the proptosis. The tumors may arise from the adrenal gland or the retroperitoneal ganglia.

Cavernous sinus thrombosis developed first in the left, later in the right sinus of a young man (Fig. 9). He was admitted with high fever, headache of recent onset, proptosis of the left eye and inability to move it in any direction. He was seen in consultation with a neurologist and treated with antibiotics and anticoagulants. He recovered completely.

The ENT consultation should include special attention to the nose, paranasal sinuses, nasopharynx and neck. A cancer of the maxillary sinus invaded the orbit causing unilateral exophthalmos in another patient (Fig. 2).

Laboratory Studies

Laboratory tests for the work-up of patients with unilateral exophthalmos include a complete blood count and, if indicated, thyroid function tests. Evaluation of the routine complete blood cell count led to the diagnosis of leukemia in a child who presented with a stony hard mass below the superior orbital rim (Fig. 10). Abnormal blast cells were seen in the peripheral smear. Bone marrow studies confirmed the diagnosis of acute leukemia with possible infiltration of the right orbit.

Radiographic Examination

In the presence of exophthalmos, an adequate X-ray survey should be taken.[6] The films must include a postero-anterior roentgenogram in nose-chin position (Waters view), a lateral roentgenogram and roentgenograms of the superior orbital fissures and optic canals. Tomograms are often useful in equivocal X-ray findings.

Special Procedures

Angiography and infrared thermography can be valuable tools in delineating the boundaries of pathological vascular orbital processes.[7]

Biopsy

A biopsy should be performed if it is determined preoperatively that knowledge of tissue diagnosis is imperative. If an exploratory biopsy is done, one should be prepared to carry the operation to a conclusion.[8]

Summary

A survey of patients with unilateral exophthalmos who were examined in the Department of Ophthalmology, University of Missouri is given. The often difficult diagnostic problems make a multidisciplinary evaluation mandatory in many cases.

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Reprints: Carl H. Ide, M.D.
University of Missouri
N309 Medical Center
Columbia, Mo. 65201

Biliary Tract Disease

(Continued from page 170)

gical treatment, cholecystectomy, provides the greatest protection from the complications.

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Common Bile Duct

(Continued from page 174)

ity is depicted.

A review of the world literature with a diagrammatic summary of other types of common bile duct duplication is included.

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Reprints: Buford T. Casebolt, M.D.
Suite 200
Garden Building West
415 E. 63rd St.
Kansas City, Mo. 64110

JOHN BETTS, M.D. *and*
ROBERT L. NEWMAN, M.D., ***Kansas City***

Obstetrical and Gynecological Uses of Ultrasonography at St. Luke's Hospital

Ultrasonography represents a mode by which a more complete evaluation of patients can be made and, in many instances, has been found to be prognostic as well as diagnostic. Although it is applicable to nearly all phases of medicine, it is of special value in obstetrics because of the absence of radiation to mother and fetus. In this paper, the authors limit their discussion to the obstetrical-gynecological applications of ultrasonography. Doctor Betts is a Resident in Obstetrics and Doctor Newman is Director of Obstetrics/Gynecology Education at St. Luke's Hospital. This work was supported by St. Luke's Hospital Foundation for Medical Education and Research.

Since the introduction of ultrasonography in the Obstetrics-Gynecology Department at St. Luke's Hospital in June, 1970, 368 scans have been done. Of these, 37 have been on gynecological patients and 333 on obstetrical patients. A list of uses is shown in Table 1.

TABLE 1

OB/GYN SCANNING

A. Placenta localization
B. Ectopic pregnancies
C. Hydatid moles
D. Dermoids
E. Ovarian cysts
F. Uterine fibroids
G. Fetal weight
H. Anencephaly
I. Hydrocephaly
J. Posterior placenta praevia
K. Hydramnios
L. Multiple pregnancy
M. Blighted ovum
N. Early abortion
O. Location of IUCD's
P. Early pregnancy diagnosis
Q. Pelvic masses
R. Fetal death

All scans in this series were done by using the Picker Model 102-Option 03 Laminograph with Model 102-04 Portoscan and Manual traversing table. Along with the laminograph, an attached Polaroid camera is mounted for permanent recording of all scans. For orientation in the photoscan to be shown, the symphysis will be to the right of the picture with the abdominal wall to the top, unless otherwise stated. In all scans, an attempt is made to fill the urinary bladder to be used as a fixed point of reference.

The majority of our scans have been done to establish fetal weight and growth patterns. It has been shown that the fetal skull increases by 1.5 mm to 1.8 mm per week. With this as a series of scans, a growth pattern may be observed as seen in Figs. 1 and 2.

Cephalometry for fetal size is done by using the B mode of the laminograph, which is a two-dimensional representation of a plane running 90 degrees to the sagittal plane of the fetal skull. This is then converted by means of a grid scale to a biparietal diameter as seen in Fig. 3. The determination of a biparietal diameter of the infant's head is assured only if the midline blip is observed. Cause for the midline blip is unknown, although several theories have been proposed. However, this will not be discussed.

Most workers[1, 2] doing ultrasonographic scanning for fetal size have established their own

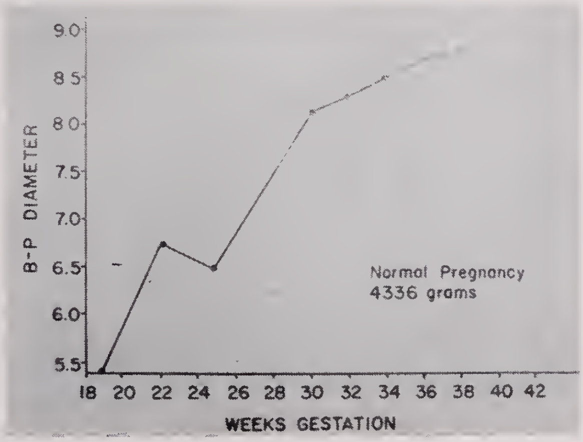

Fig. 1 Normal progression except for a reading at 22 weeks, which was felt to be of questionable value at the time of scanning. This shows a normal sloping curve tapering off after approximately the 34th week of pregnancy. The infant was born at 38 weeks weighing 4,300 gm.

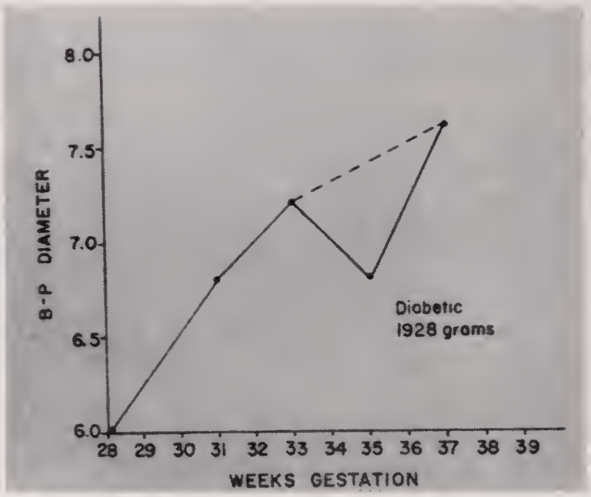

Fig. 2 The growth curve of a severe juvenile diabetic, 26 years of age, Gravida 6 Para 0. This graph shows a normal progression except at 35 weeks which was felt to be an obvious erroneous reading. The dotted line is an interpolation of the curve. This baby weighed only 1,900 gm and was estimated to weigh in the range of 2,500 gm. This was felt to represent a dysmature infant. (Weight determinations in diabetes have been shown to be almost routine underestimates, except in this particular case.)

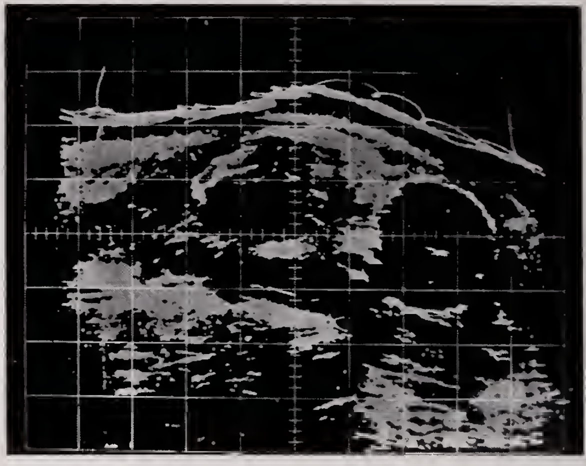

Fig. 3 The round outline of the head can be noted to the right center of the picture with the midline blip lying midway between the anterior and posterior table of the fetal skull.

conversion scale for biparietal diameter to weight, and we have established ours. Thompson and Makowski[3] (Fig. 4) show a straight line graph as weight increases and the biparietal diameter increases. A scattergram showing significant variation is seen in our series of patients (Fig. 5). An average of our determinations in fetal weight at the different biparietal diameters is seen in Fig. 6. The graph includes all values since our initial experience, including the diabetic. As can be seen readily, any similarity between this and the straight line relation is purely coincidental. However, we feel that this typifies the errors of learning. Our scans in the past few months have shown promise of following a more linear progression.

From our experience with cephalometry and weight estimations, we have been able to set some valuable and useful standards. We feel safe in stating from our experience that we can expect 100% of infants with a biparietal diameter of 7.7 cm or greater to weigh more than 2,200 gm, 98% of infants with a biparietal diameter of 8.5 cm or greater to weigh 2,900 gm and 95% of those with an 8.0 cm or greater biparietal diameter to weigh 2,500 gm or more.

Vaginal bleeding early in pregnancy always seems to cause much concern as to the status of

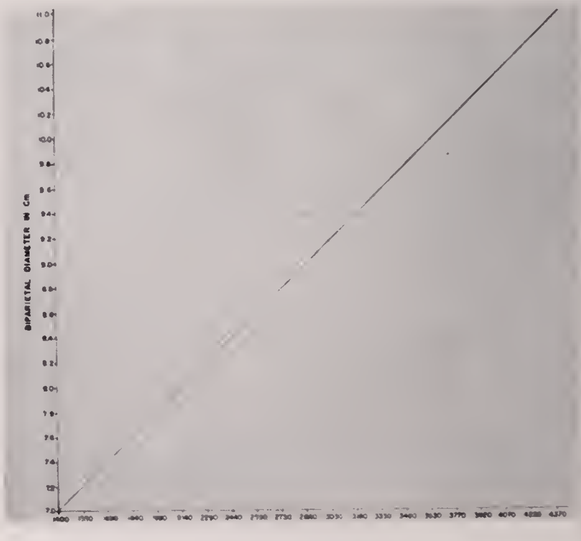

Fig. 4 Fetal weight in G. Estimation of fetal weight by biparietal diameter.

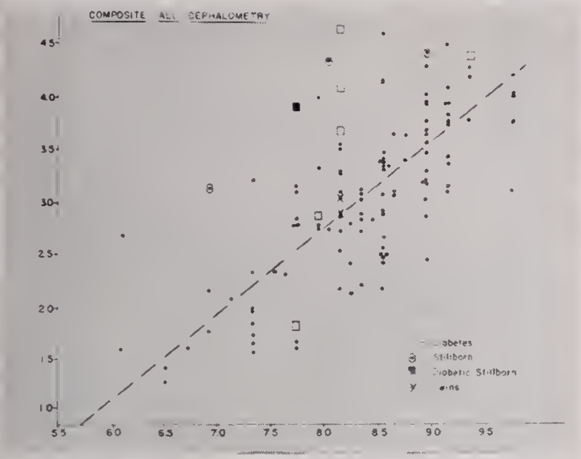

Fig. 5 Many of the marked variants on the high side are diabetics or stillbirth. The diabetics seem to set a scale of their own which appears to be 700 to 1,000 gm heavier than normal. Stillborn infants are probably in an elevated range because of fluid absorption following death.[3]

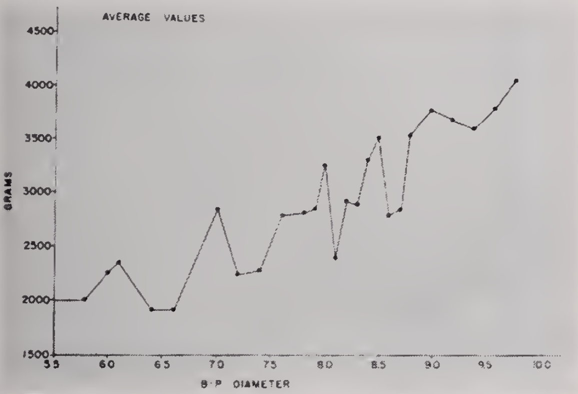

Fig. 6 Average variations in weight and different biparietal diameters.

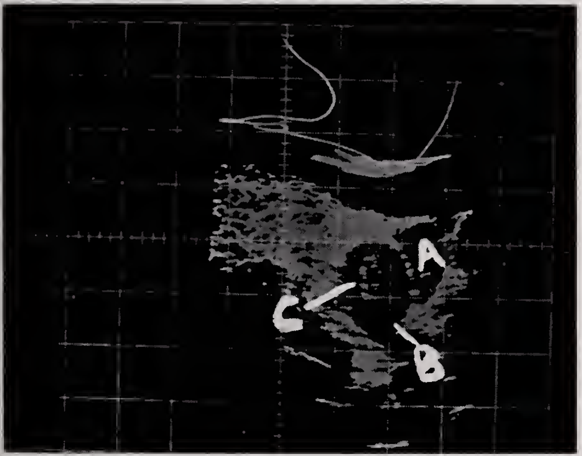

Fig. 7 Early pregnancy at six weeks from the last menstrual period. (A) bladder, (B) uterus, (C) products of conception.

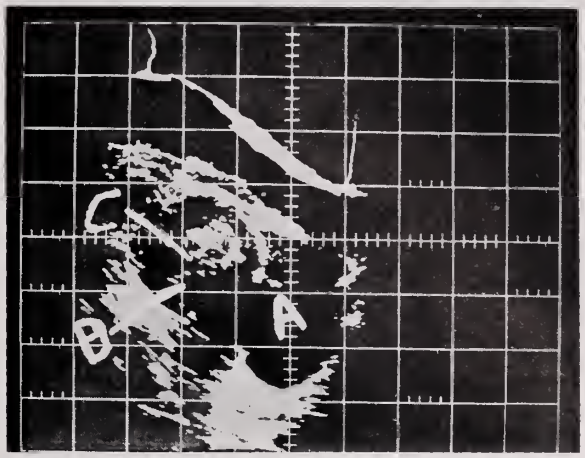

Fig. 8 Early pregnancy at seven weeks from the last menstrual period. (A) bladder, (B) uterus, (C) products of conception.

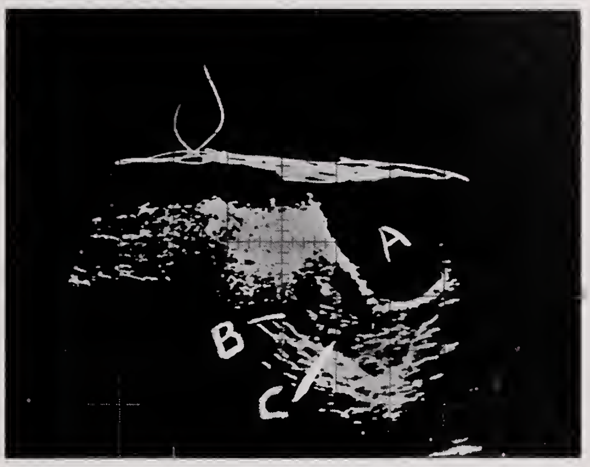

Fig. 9 The products of conception are seen well down into the uterine cavity near the internal os. (A) bladder, (B) uterus, (C) products of conception. (This woman did spontaneously abort approximately eight hours following the diagnosis of inevitable abortion by scan.)

the pregnancy at the present time. With our scan, we have been able to show several things of significant value to use in this particular situation (Figs. 7 & 8). Both Figs. 7 and 8 show high placement of the products of conception, or fetal sac, indicating an intact pregnancy vs what we interpret as an inevitable abortion, even though our definition disagrees with the classic textbook description[4] (Fig. 9). Diagnosis of incomplete vs complete abortion also can be shown by means of ultrasound scanning (Figs. 10 & 11). The final use in this group of patients is the early confirmation of the presence of an abnormal pregnancy in the form of a molar pregnancy (Fig. 12).

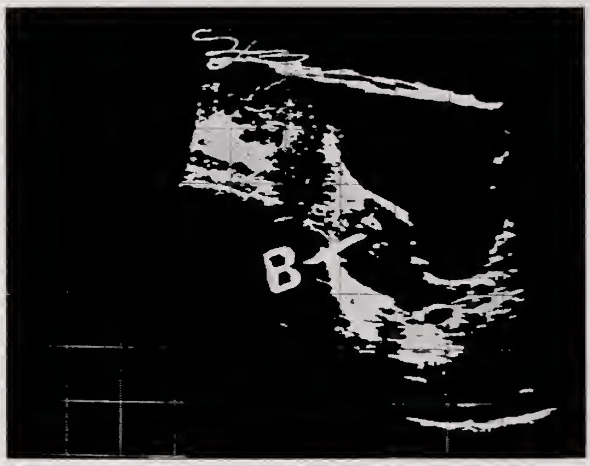

Fig. 10 The uterus is noted to be nearly empty. However, intrauterine blip (B) indicated retained products as were confirmed on suction curettage.

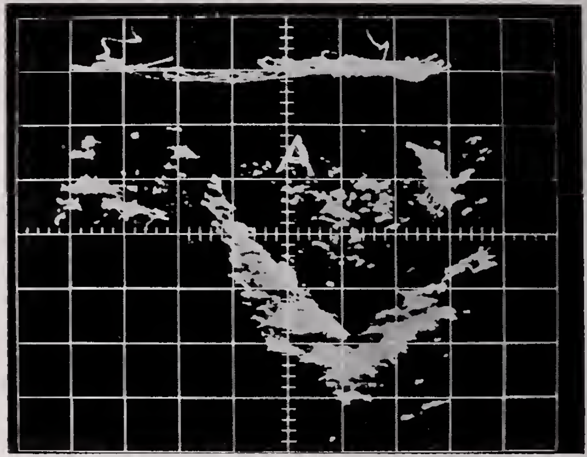

Fig. 12 The bladder is not well outlined with the large area being the uterine cavity (A). The rather flocked, mottled appearance is that of a molar pregnancy as was confirmed in suction curettage.

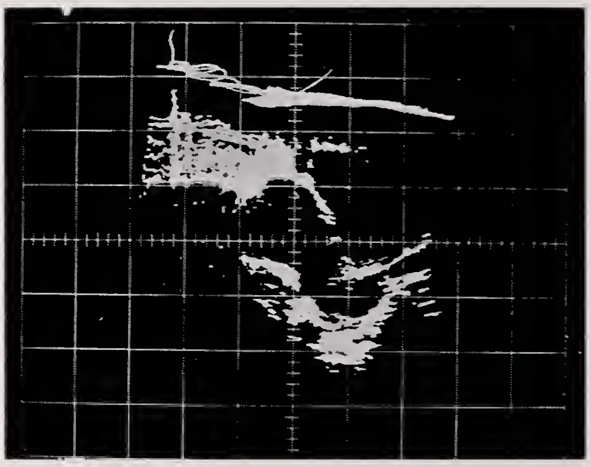

Fig. 11 The uterine cavity is noted to be completely free of any tissue as indicated by the absence of blips. This, too, was confirmed at the time of suction curettage.

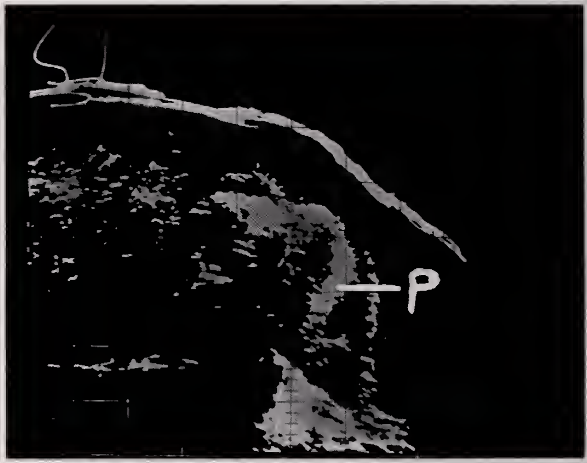

Fig. 13 The placenta (P) is noted to come from the anterior surface and then across the lower portion of the uterus and the cervical os. This was a placenta praevia as was confirmed on double set-up and cesarean section. (Neither fetal skull nor the bladder are well represented in this picture.)

Vaginal bleeding late in pregnancy is of much more concern because of the therapy which may be necessary. The presence of a placenta praevia can be readily determined by means of ultra sound scanning because of the consistent appearance of the placenta. In most cases, the confirmation of placement of the placenta will not alter the course of treatment. However, in our opinion, ultrasonography represents a more accurate means of determining placental localization than by radiographic methods (Fig. 13).

Multiple gestations have appeared to be much easier to diagnose very early in pregnancy rather than later. This is probably on the basis of the difficulty encountered in obtaining both fetal skulls on the same scan (Fig. 14).

A rapidly enlarging uterus can represent much confusion. It can be caused by multiple pregnancies, hydramnios or an associated pelvic mass. These can be readily separated by means of ultrasonography (Fig. 15).

The detection and confirmation of fetal death may be confirmed in many different ways. The loss of fetal heart tone, as determined by the use of Doptone, is probably the easiest and most accurate method. However, findings do become readily apparent on scan early following fetal death. These have been shown to occur much more rapidly than those detected by x-ray (Fig. 16).

Gynecologic applications of the ultrasound scanning is more of confirmatory value than of true diagnostic value. The presence of pelvic tumors may be confirmed quite readily by means

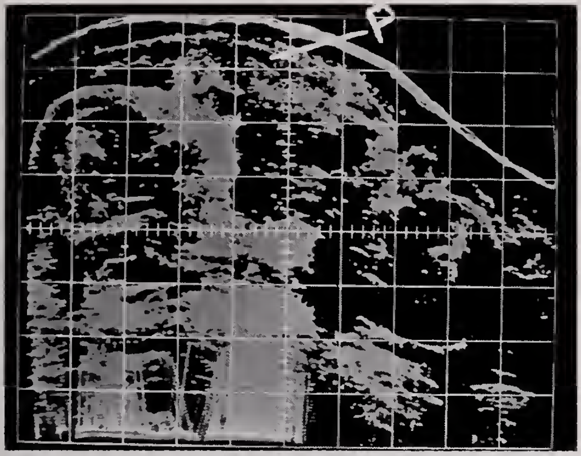

Fig. 14 Set of twins at 34 weeks gestation with the outline of the head noted to the right and to the left of the scan. The placenta (P) is well outlined anteriorly.

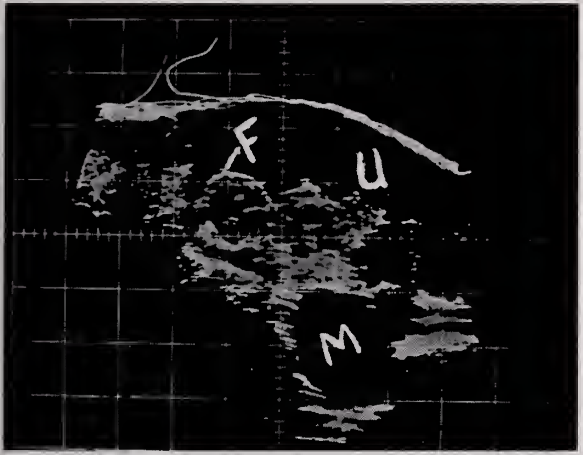

Fig. 15 This is an early pregnancy of approximately 18 weeks in which the uterus (U) and fetal skull (F) outline are seen above a cystic mass (M). This was a large ovarian cyst as was confirmed at laparotomy during the pregnancy.

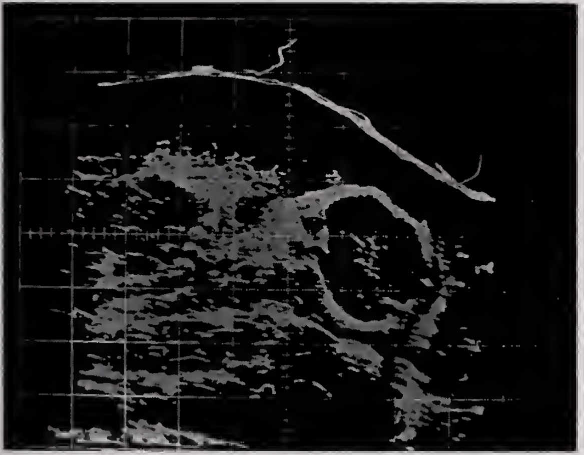

Fig. 16 The above patient had lost the sensation of fetal motion approximately 72 hours prior to the scan and fetal heart tones were not heard at the time of the examination. Note the rather oblong appearance of the fetal skull outlined with the loss of a definite midline blip indicating fetal demise and the rapid loss of tissue consistency.

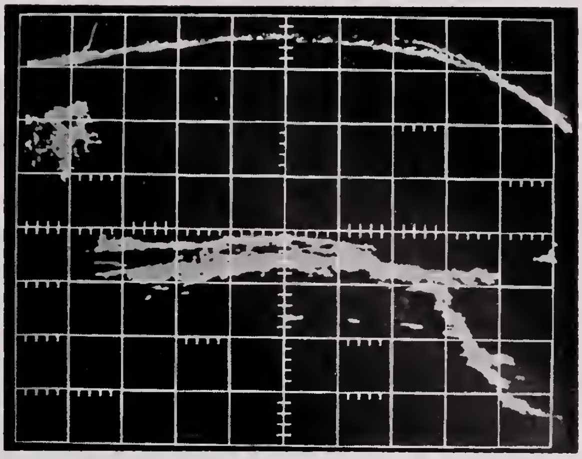

Fig. 17 A sagittal scan of an extremely large cystic tumor of the ovary in a 14-year-old girl. Note the absence of blips within the space indicating a cystic nature.

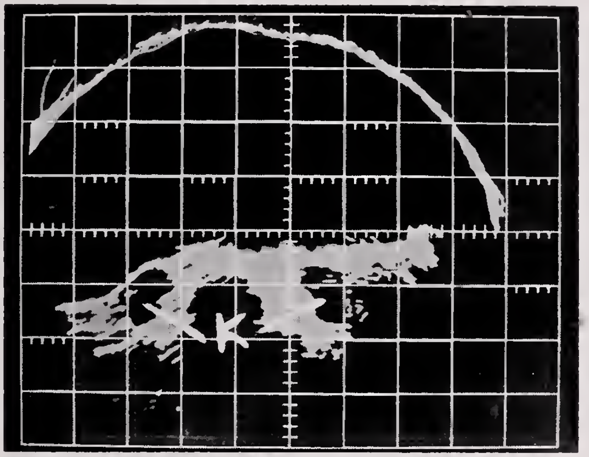

Fig. 18 A transverse scan of the same mass above the level of the umbilicus showing lateral excursion. Also noted posteriorly are scans of the lower poles of both kidneys (K). At surgery, this was found to be a large cystoma of the ovary.

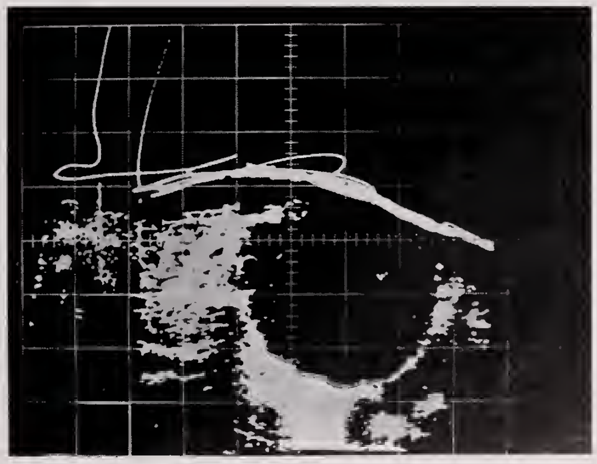

Fig. 19 A 46-year-old woman with a pelvic mass felt to be ovarian. Note the relatively smooth outline of the cyst giving the impression of a benign tumor.

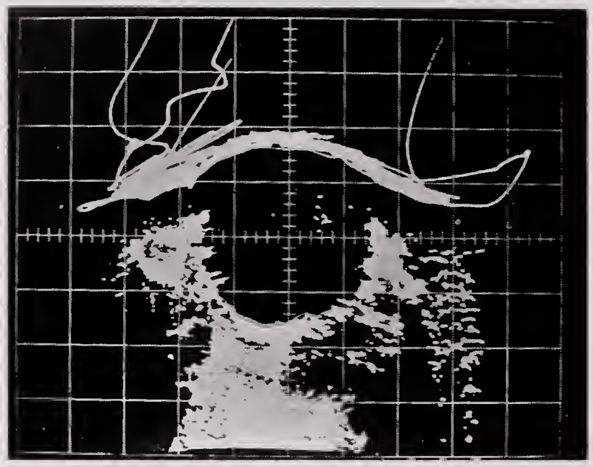

Fig. 20 A transverse scan of the previous patient showing essentially midline structure. At laparotomy, this was confirmed as a benign tumor of the ovary.

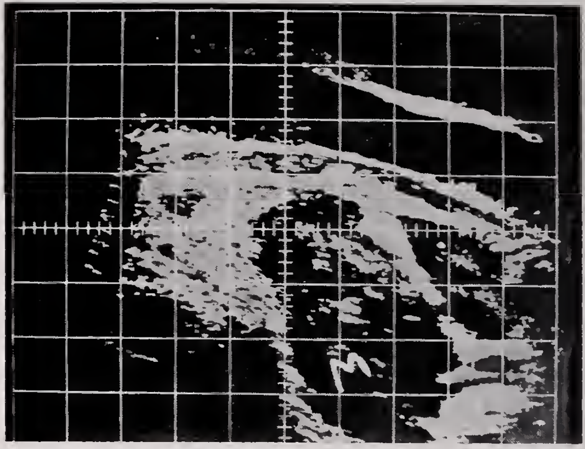

Fig. 21 A 24-year-old woman seen with a large fixed pelvic mass (M). Note the rather irregular and mottled appearance of the tumor outline as well as the intracavitary blips.

of scanning with accurate measurements to go with the clinical picture. Some efforts have been made to distinguish the malignant masses from the benign and the cystic from the solid. Several examples are shown in Figs. 17 through 22.

It has been shown that the applications of the ultrasonography seem to be manifold. Limitations to its usefulness, in our hands, have been directly proportional to the experience of the operator. In many instances, the findings are of a confirmatory nature and do not alter the planned therapy.

We do not imply that we have been 100% successful in any and all of the before mentioned uses. As indicated earlier, we have had our learning pains and embarrassing moments, particularly when a second twin appears unexpectedly after scanning.

Ultrasonography, like so many other procedures and laboratory tests, is not the total answer, but it is an adjunct to be correlated with the clinical picture. We feel it has been an interesting and valuable tool.

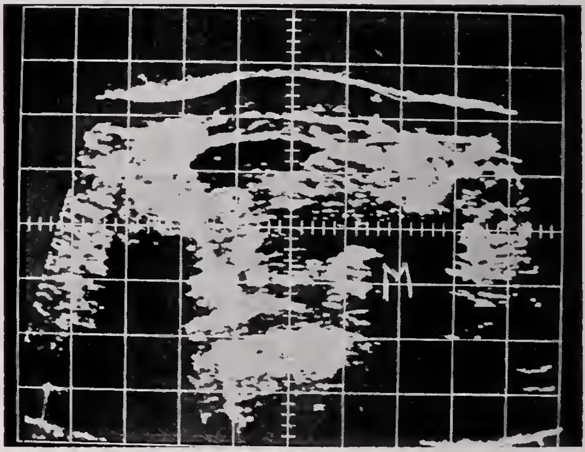

Fig. 22 A transverse scan of the previous patient again showing irregularity and ragged appearance of this tumor mass (M). At laparotomy, this was found to be a malignant tumor of the ovary with metastasis.

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Please note! A letter from Henry K. Silberman, M.D., author of the article, "Appointment with Death," states that his present assignment was incorrectly expressed on page 39 of the January, 1973 issue of MISSOURI MEDICINE. Doctor Silberman is Professor of Psychiatry and Director of Psychiatric Outpatient Clinic, Medical College of Virginia. His address is Box 253, M.C.V. Station, Richmond, Va. 23298. Unfortunately, the original correction arrived too late to be included in the January issue.

FERNANDO J. deCASTRO, M.D. *and*
URSULA T. ROLFE, M.D., *St. Louis*

On-the-Job Training of the Pediatric Nurse Practitioner

An Evaluation

A PEDIATRIC NURSE PRACTITIONER is a registered nurse who has completed an action-oriented training program in ambulatory pediatrics, a pediatric setting geared to care for the nonhospitalized pediatric patient.[1-7]

The shortage of pediatric health manpower and the need to improve the delivery of health care to children requires no discussion. There is a need for doctors and an even greater need for nurses. However, a pediatric nurse practitioner program does not remove nurses from nursing; it allows them to enlarge their knowledge and confidence in order to function more effectively in a primary care pediatric ambulatory setting.[1, 2]

There are numerous programs training pediatric nurse practitioners in the United States;[3] some are training nurses who are not employed while they are attending the program[4-6] and some are geared only for nurses who are fully employed at the time.[7] In our hospital, we train only nurses who are fully employed while going through the program.

Regardless of the method of training, both consumers' acceptance of the pediatric nurse practitioner as well as measurements of the trainee's knowedge become essential in establishing the usefulness of such professionals. In this paper, both consumers' acceptance of the program as well as an ongoing evaluation of the trainee's knowledge were measured.

METHOD

The program was evaluated in two areas: (1) by measuring consumers' acceptance of the training of pediatric nurse practitioners and (2) by measuring the trainee's knowledge.

Consumers' acceptance was measured in 200 randomly selected parents bringing their children for care at Cardinal Glennon Memorial Hospital for Children, which is a midwestern teaching hospital. One hundred parents completed the questionnaire before the nurse practitioners were delivering care and one hundred additional parents did so after the nurse practitioners were actively delivering care in our Clinic. Consumers' acceptance was measured by means of a questionnaire which explained the program to the parents and also requested them to state their attitude toward the program in a scale of zero to ten in which zero represented the lowest acceptance and ten the highest. The questionnaire can be obtained from the authors upon request.

The trainees were all registered nurses who were employed full time and who were selected on their motivation for participating in the program and on their future goals. In order to do so, their knowledge was evaluated by written examinations for ambulatory pediatrics given at the onset, at the end of the first quarter and at the end of the program using other nurses (RN), senior medical students (SMS) and pediatric residents (PR) as control.

The written examinations were designed to

In this study, acceptance of pediatric nurse practitioners by the consumers as well as the trainee's knowledge were measured. Evaluation showed that a midwestern consumer population accepted pediatric nurse practitioners well and that on-the-job training of nurses as pediatric nurse practitioners seems to be an effective way to increase the nurse's knowledge of ambulatory pediatrics. This paper was presented in part at the Ambulatory Pediatric Association 11th Annual Meeting and at the 99th American Public Health Association Meeting in 1971. The authors are from the Department of Pediatrics, St. Louis University School of Medicine.

cover primary care pediatrics, as follows: (1) health supervision including history and physical examination as well as developmental appraisal, (2) clinical problems encountered in primary care pediatrics and (3) social problems encountered in primary care pediatrics.

Results

Pediatric nurse practitioners were well accepted by the consumers. The mean score of the consumers' acceptance questionnaire was nine in a scale of zero to ten. The mean acceptance scores, before and after the nurse practitioners were delivering care, were actually nine and 9.8 respectively.

Table 1 shows the results of the written examinations. At the onset of the program, the six pediatric nurse practitioners (PNP) in our program, all employed full-time and all selected because of motivation, scored higher than a stratified random sample of registered nurses (RN) working in our hospital. [The mean score for the pediatric nurse practitioner (PNP) was 56 ± 9 (± S.D.) and for the stratified sample of nurses (RN) working in the hospital was 34 ± 14 (± S.D.) p less than 0.01, equal to senior medical students (SMS). The mean score for the pediatric nurse practitioner (PNP) was 56 ± 9 (± S.D.) and for the senior medical students (SMS) was 57 ± 8 (± S.D.) p greater than 0.05, and lower than pediatric residents (PR). The mean score for the pediatric nurse practitioner (PNP) was 56 ± 9 (± S.D.) and for the pediatric residents (PR) was 86 ± 9 (± S.D.) p less than 0.01.]

TABLE 1

RELATIVE PERFORMANCE OF PEDIATRIC NURSE PRACTITIONER

	Onset (PNP=56±9)	*First Quarter* (PNP=85±15)	*End* (PNP=91±4)
Nurse . .	$34 \pm 14 p < 0.01$		
SMS . . .	$57 \pm 8 p > 0.05$	$65 \pm 10 p < 0.01$	$63 \pm 17 p < 0.01$
PR	$86 \pm 9 p < 0.01$		$94 \pm 1 p > 0.05$

At the end of the first quarter of the program, the pediatric nurse practitioners were found to score higher than the senior medical students (SMS). [The mean score for the pediatric nurse practitioner (PNP) was 89 ± 11 (± S.D.) and for the senior medical students (SMS) was 65 ± 10 (± S.D.) p less than 0.01.]

At the end of the program, i.e., at the end of 200 hours of instruction (100 didactic lectures and 100 of supervised clinical experience) spread over eight months, the pediatric nurse practitioners were found again to score higher than the senior medical students. [The mean score for the PNP was 91 ± 4 (± S.D.) and for the SMS was 63 ± 17 (± S.D.) p less than 0.01] and equal to pediatric residents. The mean score for the pediatric resident was 94 ± 1, and for the pediatric nurse practitioner 91 ± 4, p greater than 0.05.]

Comments

To cope with the shortage of pediatric manpower and the increased demand for health care, a pediatric nurse practitioner program was started in a midwestern teaching hospital.

The methods of training pediatric nurse practitioners in the United States are numerous at the present time.[1-8] However, regardless of the method of training employed, the consumers' acceptance as well as the trainee's knowledge are essential parameters in the evaluation of such programs.

Although the validity of a questionnaire to measure consumers' acceptance as well as the acceptance of pediatric nurse practitioners can be argued,[9] questionnaires are useful, commonly-utilized tools to measure doctor-patient interactions.[2-11] Of course, how well prepared health professionals are becomes immaterial if they are unacceptable to the consumer. The present study shows by means of a questionnaire that a midwestern consumer population accepted pediatric nurse practitioners well.

The present study also shows that pediatric nurse practitioners in training improved significantly in their knowledge of primary care pediatrics as measured against other health professionals in training by means of written examinations.

Adequate evaluation of the level of knowledge is always difficult to accomplish. By and large, in the entire educational system of more accepted health professionals (for example, medical students and residents), we depend upon examinations which, to a great extent, are written.[12, 13] There have been a few attempts to measure health professionals in training by techniques other than a written or oral examination. Some of these techniques are by videotaping interviews,[14] by evaluations of patient care by an index disease[15] and by evaluation of physical assessment of children comparing nurse practitioner and pediatrician.[16] The results of these attempts are interesting but they are still experimental. In the present study, nurse-practitioner knowledge was measured by written examinations and was found to be adequate to deliver primary care pediatric services.

This preliminary evaluation showed that a midwestern consumer population accepted the training of PNPs well and that on the job training of fully-employed nurses as PNPs seems to be an effective way to increase nurses knowledge of ambulatory pediatrics.

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ABFP Certification Examination

The American Board of Family Practice announces that it will give its next two-day written certification examination on Oct. 20-21, 1973. It will be held in various centers geographically distributed throughout the United States. Information regarding the examination can be obtained by writing to Nicholas J. Pisacano, M.D., Secretary, American Board of Family Practice, Inc., University of Kentucky Medical Center, Annex #2, Room 229, Lexington, Ky. 40506.

Please Note: It is necessary for each physician desiring to take the examination to file a completed application with the Board office. Deadline for receipt of applications in this office is *Aug. 1, 1973.*

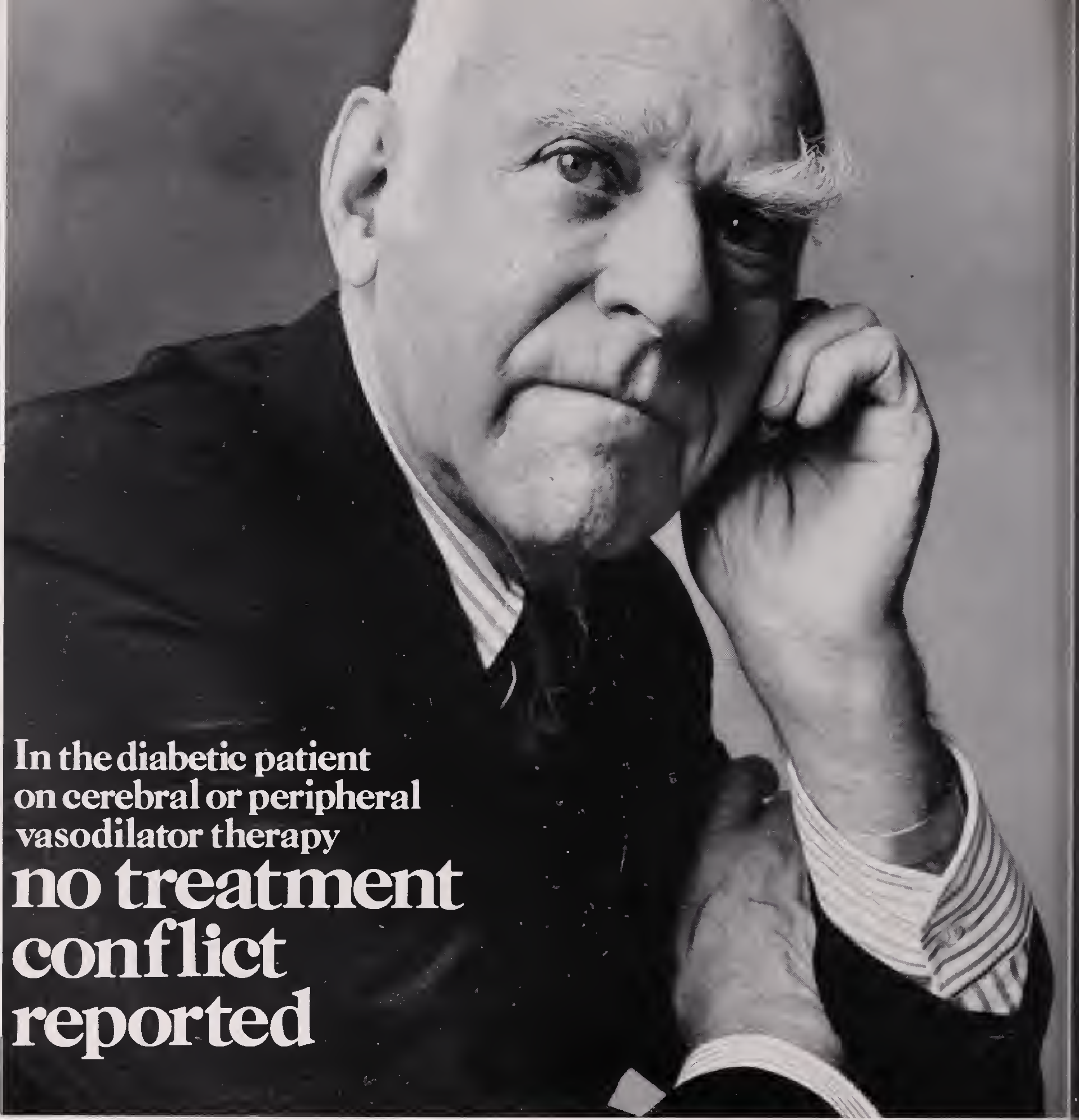
In Memoriam

Fleming, Paul D., M.D., 822 Washington, St. Louis, a graduate of Washington University, 1936; member St. Louis County Medical Society; age 65; died Nov. 8, 1972.

Magidson, Joseph, M.D., 615 Forest Court, Clayton, a graduate of Washington University, 1925; member St. Louis County Medical Society; age 75; died Nov. 18, 1972.

Pollack, Maxwell A., M.D., 604 Thunderbird, Chesterfield, a graduate of National University, 1912; member St. Louis Medical Society; age 84; died Nov. 21, 1972.

Pallett, Harold A., M.D., 5000 Oak, Kansas City, a graduate of the University of Colorado, 1934; member Jackson County Medical Society; age 69, died Jan. 5, 1973.



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REFERENCE: 1. Samuels, S. S., and Shaftel, H. E.: J. Indiana Med. Ass. 54:1021-1023 (July) 1961.

Mead
LABORATO

President's Message

As this reaches you, your officers and executive staff, as well as the designated committees, are in the throes of preparing for the MSMA Annual Session in St. Louis on March 29-April 1. The full program has been published in the February issue and this issue of Missouri Medicine. Certainly, 27 scientific programs instituted by 20 specialty societies should furnish you with an opportunity for postgraduate education. The St. Louis hosts are working on some unusual entertainment features and the Woman's Auxiliary to the MSMA has a full schedule of events for our ladies.

Walter T. Gunn, M.D.

At the last Council meeting, Dr. Herbert R. Domke reported in regard to the State Health Commission. He expects sweeping reforms of the present health programs set-up by both President Nixon and Governor Bond. Unfortunately, one of the casualties seems to be the Bi-State Regional Medical Program covering the St. Louis area and Southern Illinois. Interested doctor-members of this group are working diligently to have the program reinstated. The AMA *Legislative Roundup* for Feb. 9, 1973 reports, "*Federal Rules of Evidence* . . . Wednesday, the Senate by a voice vote adopted S. 583 which would postpone the effective date of a new code of evidence to be applied in the federal courts throughout the country. With the exception of communications during psychotherapy treatment, the proposed rules would abolish the physician-patient privilege in federal court proceedings. Accordingly, any communication outside of psychotherapy could be divulged in federal court."

Dean William Mayer of Missouri University stated that he had just attended a meeting of all state licensing boards plus other organizations, and he notified us that recertification is definitely coming up in both states and specialty groups. In fact, no less than seven specialty groups are now actively preparing plans for recertification. On May 11-13 at the Lodge of the Four Seasons, Lake of the Ozarks, the Missouri Hospital Association will hold a TAP session which will be cosponsored by the MSMA. The Joint Commission on Accreditation of Hospitals will explain what it believes to be a critical deficiency in hospital operations—a dearth of acceptable internal quality assurance programs (QAP). A physician on your hospital staff should attend.

At the Public Affairs Conference on February 3-4, Mr. Lee Mortenson of the AMA stated that 2,400 physicians in the state of Missouri do not belong to the AMA. If you have a physician friend or acquaintance in this category, invite him to see MSMA in action at the Annual Convention.

See you in St. Louis on March 29.

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Mrs. James A. Reid	*Mrs. Gerald L. Miller*

Kenneth C. Hollweg, M.D.

We all sincerely look forward to greeting every MSMA member and his wife at the Public Affairs-MMPAC Breakfast. It is the first event of its kind and promises to be a highlight of the 1973 annual meeting.

To all physicians' wives, we suggest, "Add friends and fun to your life! Try the Woman's Auxiliary!" Come and enjoy our special Hospitality Hour, luncheon and "You-Made-It Fashion Show" and the Installation Luncheon, as well as our general and educational meetings. A special welcome awaits you at our Registration Desk where you will receive complete information (Thursday, 1:30 PM-5 PM; Friday and Saturday mornings).

Mrs. Keith D. Jones
President

EDITORIAL

PLAN AHEA^{D} for AN OUTSTANDING MEETING

This is a special invitation to all members of the MSMA to plan now to take advantage of the 115th Annual Session from March 29 through April 1, 1973 at the Chase-Park Plaza Hotel in St. Louis. Planning ahead is essential for the physician if he is to be free to attend the entire meeting and obtain the fullest benefit of the great and many opportunities offered by the scientific programs and exhibits.

The scientific program for 1973 involves the largest number of individual sessions ever offered at our annual conventions. We will not give a detailed review of it here, but we do ask you to turn to page 146 of this Journal where you will find the complete scientific program and a listing of all events of the meeting.

There will be 27 important scientific sessions on Friday and Saturday. Sponsoring organizations which have invested a great deal of time and effort in arranging the programs include the Missouri State Allergy Association; Missouri Society of Internal Medicine; Missouri Chapter, American College of Physicians; Missouri Chapter, American Academy of Pediatrics; Missouri Psychiatric Association; Missouri Academy of Psychiatry; Missouri State Surgical Society; Missouri Society of Anesthesiologists; Missouri Division, American Cancer Society; Missouri Ophthalmological Society, Inc.; Missouri Radiological Society; Missouri Heart Association; and Missouri Dermatological Society, Inc.

The general sessions at 9 AM each day preceding the scientific sessions will be valuable to physicians of all specialties. On Friday, Missouri Congressman James W. Symington and Kentucky Congressman Tim Lee Carter will discuss pending national health insurance programs legislation. On Saturday, representatives of the American College of Physicians, American College of Surgeons and the American Medical Association will discuss the subject, "Whither Medicine."

We also call your attention to the nine specialty organizational luncheons or dinners to be held on Friday and Saturday, in addition to the University of Missouri Alumni Luncheon on Friday and the MSMA General Luncheon and 50-Year Club Luncheon on Saturday.

The St. Louis University and Washington University Alumni groups have scheduled individual receptions on Saturday preceding the Annual Banquet in Honor of Past-Presidents of the MSMA, which is the most important social event of the meeting for physicians and their wives.

A visit to the House of Delegates is important in order to understand fully the democratic workings of the MSMA. The House of Delegates will meet at 1:30 PM on Thursday and at 4 PM on Friday, with a final breakfast meeting at 7:30 AM on Sunday for concluding the business of the session. You are urged to attend the Reference Committee meetings, express your opinions and make your own personal recommendations by participating in the true democratic process that prevails in the Association.

The technical exhibits are always well worth viewing and a source of information. Also, it is imperative that we all cooperate by visiting these exhibits so that the exhibitors will continue to participate in our annual meeting.

Will your wife accompany you to the Annual Session? Please assure her that she will be welcomed at the Annual Convention of the MSMA Woman's Auxiliary which will be held in conjunction with the Annual Session at the Chase-Park Plaza Hotel. She'll enjoy meeting the other physicians' wives and attending the interesting meetings, luncheons, receptions and other convention activities. If she is not a member, she should contact Mrs. Keith D. Jones, President, upon her arrival or visit the Woman's Auxiliary registration desk Thursday afternoon or Friday for more information.

To sum it up, the 115th Annual Session promises to be outstanding. It represents a year of planning ahead so that the family physician and the specialist can benefit from the timely topics to be presented by outstanding authorities. Select the subjects of your choice now and arrange to be there.

In addition to the acquisition of knowledge, there is the satisfaction that comes with learning, the healthful relaxation of getting away from it all, the joys of seeing friends, classmates and colleagues and the knowledge that you are an active member of the Missouri State Medical Association and, thus, contributing to its activities and the policies and decisions that will affect medicine and health care in the year to come.

County Society News

FIRST DISTRICT

COUNCILOR
JOHN N. MARTIN, M.D., ST. JOSEPH

Buchanan County Medical Society

A joint meeting of the St. Joseph and area pharmacists and the Buchanan County Medical Society was held on January 3 in the Empire Room of the Hotel Robidoux in St. Joseph. The event featured a dinner and program.

Presiding jointly were Dr. Elza F. Butler, President of the Medical Society, and Mr. William J. Kenney, area council representative of the Missouri Pharmaceutical Association. The speaker was Dr. William A. Strickland, Jr., dean and professor of pharmacy at the University of Missouri-Kansas City. Dr. Strickland's subject was "Pharmacy Education in Missouri—Today and Tomorrow." He also discussed "Area Health Education Center Concept as It May Affect the St. Joseph Area."

Arrangements for the program were made by Dr. William B. Rost for the Medical Society and Mr. Kenney. Meeting details were arranged by members of the Medical Society Program Committee, who are Drs. Gerald E. Fox, Chairman; Edward M. Beheler and Sydney L. Bryant. Fifty-four physicians and pharmacists attended the meeting.

G. Tyson Carpenter, M.D., *Secretary*

SECOND DISTRICT

COUNCILOR
LYSLE M. BACH, HANNIBAL

Chariton-Macon-Monroe-Randolph County Medical Society

The Chariton-Macon-Monroe-Randolph County Medical Society met on January 11 in the library of Woodland Hospital in Moberly.

Twelve members were present. Mr. Mike Smith, pharmacist, was a guest of Dr. Thomas S. Fleming. Dr. Robert Young, President, was in charge of the meeting.

The professional program consisted of the presentation of unusual case reports by the following members: Drs. J. Will Fleming, Jr., C. C. Cohrs, Robert Tompson and F. L. Harms.

Members present were Drs. F. L. Harms, Chariton County; J. E. Campbell and D. E. Eggleston, Macon County; F. A. Barnett, Monroe County; and Josephine D. Baker, W. D. Chute, C. C. Cohrs, P. V. Dreyer, J. Will Fleming, Jr., T. S. Fleming, L. E. Huber, Robert Tompson, and Robert Young, Randolph County.

Robert V. Tompson, M.D., *Secretary*

Scientific Sessions Important to Every Physician!

115th MSMA ANNUAL SESSION

March 29-April 1, 1973 St. Louis Chase-Park Plaza Hotel

IMPROVED ACCIDENT & HEALTH PROGRAMS

The Disability Income Policy sponsored by the Missouri State Medical Association since 1943 has now been made GUARANTEED RENEWABLE and income benefits are available up to $300.00 weekly to members under age 56 subject to acceptance by the Company.

Also, the Major Hospital and Nurse Expense Program offers higher limits with increased Room & Board Benefits.

For Complete information call or write to:

EGGERT-CARROLL-SCHROEDER AGENCY, INC.
112 N. Fourth St., St. Louis, Mo. 63102
PHONE: 231-4465-66
(Eastern Missouri Administrators)

ALTMAN-SINGLETON & CO.
114 W. 10th St., Kansas City, Mo. 64105
PHONE: 842-6292
(Western Missouri Administrators)

Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole. **Warnings:** If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established. **Precautions:** Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored. **Adverse Reactions:** Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopeni malodor of the urine, crystalluria, hematuria; appearance of liv Ascaris in the mouth and nose. Hypersensitivity reactions

A New Dosage Form:

Chewable Tablets 500 mg Mintezol®

(THIABENDAZOLE | MSD)

so easy to take everyone in the family can keep to the regimen you prescribe

include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy. **Supplied:** Chewable tablets, containing 500 mg thiabendazole, in boxes of 36, strip packaged, individually foil wrapped; Suspension, containing 500 mg thiabendazole per 5 cc, in bottles of 120 cc.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD
MERCK
SHARP &
DOHME

addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

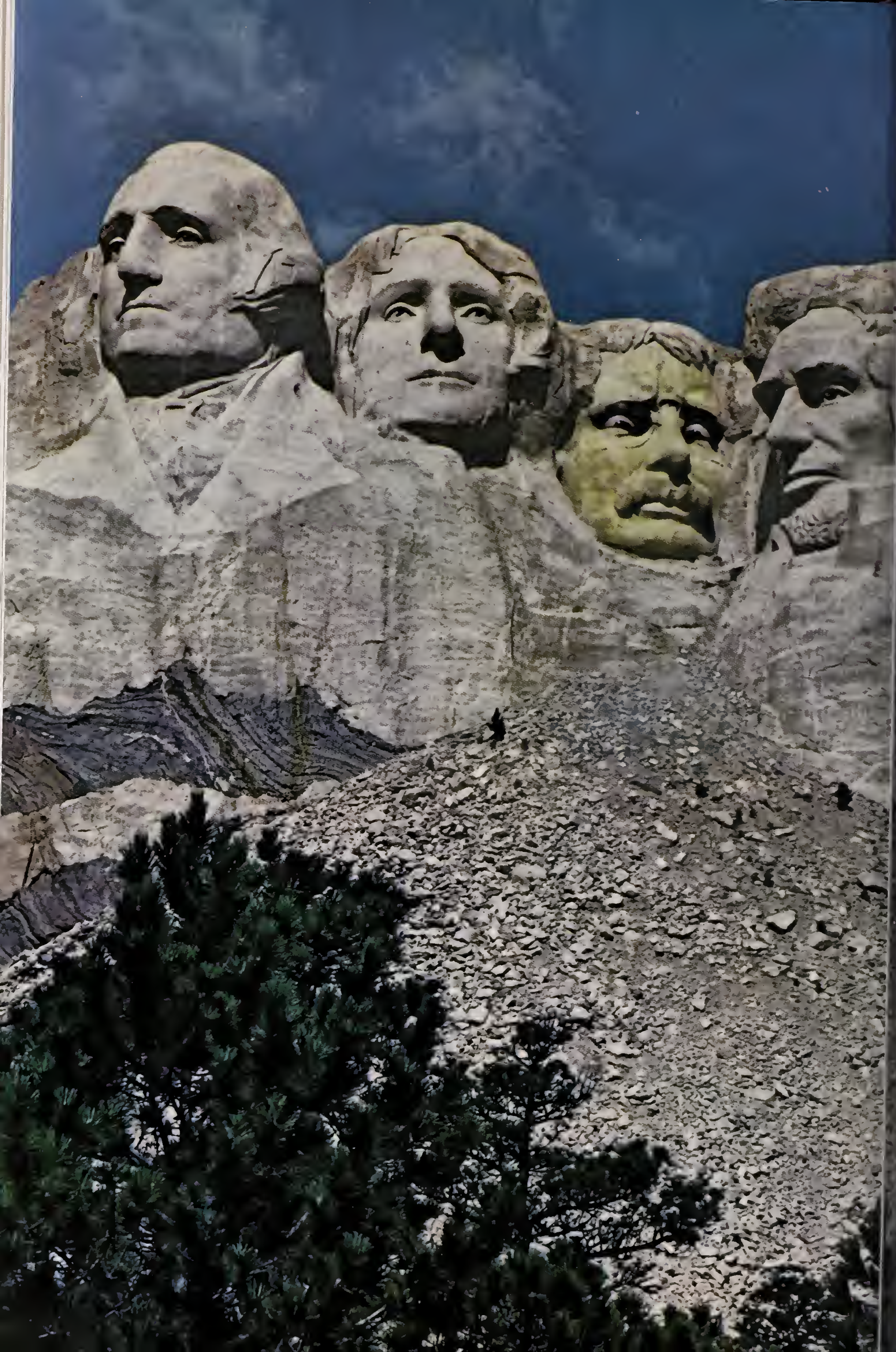
Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.



Let's make his position perfectly clear...

Antivert®
(meclizine HCl)
for vertigo*

ntivert® (meclizine HCl) has been found
seful in the management of vertigo associ-
ted with diseases affecting the vestibular sys-
m. It is available as Antivert (12.5 mg.
eclizine HCl) and Antivert/25 (25 mg.
eclizine HCl) scored tablets for conven-
nce and flexibility of dosage. Antivert/25
25 mg. meclizine HCl) Chewable Tablets
re available for the management of nausea,
omiting, and dizziness associated with mo-
on sickness.

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12th-15th day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

in Brief

A summary of AMA, medical & health news

American Medical Association
535 N. Dearborn St.
Chicago, Ill. 60610

The 26th National Conference on Rural Health of the AMA will be held on March 29-30 in Dallas at Statler-Hilton Hotel. Theme of the conference will be "Rural Health—Innovation to Implementation." Conference goals will be fourfold: to study community organization for rural health services; to emphasize coordination of rural development and rural health services; to review some possible solutions for rural health care delivery systems; and to study evaluation techniques for rural health services.

Presiding will be Robert E. Reiheld, M.D., of Orrville, Ohio, chairman of the AMA's Council on Rural Health.

AMA's Medicredit plan, a national health insurance proposal that would provide federal income tax credits to help finance the purchase of private health insurance, had 130 sponsors in Congress within a week after it was introduced. The Senate number of the bill is S 444. The House number is HR 2222. New features of this year's bill are coverage of home health care services, dental care for children and emergency dental services for all. Coverage against catastrophic illness would be financed by the government for all citizens.

All U. S. physicians will receive an AMA questionnaire concerning professional activities. Information from the questionnaires will be used in the publication of the 1973 edition of the AMA's *American Medical Directory*.

Price schedules and signs are no longer required in physicians' offices and health care institutions. Phase 3 price control regulations revoked the Phase 2 regulation that had required physicians and institutions to keep available for public inspection a schedule of charges for principal services and to post a sign giving the location of the schedule.

AMA's Volunteer Physicians for Vietnam Program, funded by the Agency for International Development, will continue at least through next June. The program will concentrate on establishing continuing medical education. Physicians interested in volunteering for 60-days of service should contact Volunteer Physicians for Vietnam, AMA Headquarters.

**Gantrisin® (sulfisoxazole) Roche® provides
your patients with
many important advantages:**

- high urinary levels
- generally good tolerance
- high solubility at average urinary pH
- rapid absorption
- rapid renal clearance
- high plasma concentrations
- economy (average cost of therapy: less than 6½¢ per tablet)

**Before prescribing, please consult complete proc
information, a summary of which follows:**

Indications: Nonobstructed urinary tract infecti
(mainly cystitis, pyelitis, pyelonephritis) due to s
ceptible organisms. **Important Note:** ***In vitro*** **s
sitivity tests not always reliable; must be coordina
with bacteriological and clinical response.
aminobenzoic acid to follow-up culture media.
creasing frequency of resistant organisms limits u
fulness of antibacterial agents, especially in chro
and recurrent urinary infections.** Maximum safe t
sulfonamide blood level, 20 mg/100 ml; meas
levels as variations may occur.

Contraindications: Hypersensitivity to sulfonamic
infants less than 2 months of age; pregnancy at t
and during the nursing period.

Warnings: Safety in pregnancy not established.
not use for group A beta-hemolytic streptococcal
fections, as sequelae (rheumatic fever, glomerulc
phritis) are not prevented. Deaths reported f
hypersensitivity reactions, agranulocytosis, apla
anemia and other blood dyscrasias. Sore throat, fe
pallor, purpura or jaundice may be early indicati
of serious blood disorders. CBC and urinalysis v
careful microscopic examination should be perforr
frequently.

Precautions: Use cautiously in patients with impai
renal or hepatic function, severe allergy or bronc
asthma. Hemolysis, frequently dose-related, may
cur in glucose-6-phosphate dehydrogenase-defic
patients. Maintain adequate fluid intake to prev
crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulc
tosis, aplastic anemia, thrombocytopenia, leukope
hemolytic anemia, purpura, hypoprothrombinemia
methemoglobinemia; *Allergic reactions:* Erythe
multiforme (Stevens-Johnson syndrome), generali
skin eruptions, epidermal necrolysis, urticaria, se
sickness, pruritus, exfoliative dermatitis, anaphy
toid reactions, periorbital edema, conjunctival
scleral injection, photosensitization, arthralgia and
lergic myocarditis; *Gastrointestinal reactions:* Naus
emesis, abdominal pains, hepatitis, diarrhea, a
rexia, pancreatitis and stomatitis; *C.N.S. reactic*
Headache, peripheral neuritis, mental depressi
convulsions, ataxia, hallucinations, tinnitus, ver
and insomnia; *Miscellaneous reactions:* Drug fe
chills and toxic nephrosis with oliguria and anu
Periarteritis nodosa and L.E. phenomenon have
curred. Due to certain chemical similarities with sc
goitrogens, diuretics (acetazolamide, thiazides)
oral hypoglycemic agents, sulfonamides have cau
rare instances of goiter production, diuresis and hy
glycemia as well as thyroid malignancies in rats
lowing long-term administration. Cross-sensiti
with these agents may exist.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche
Nutley, N.J. 07110

cute, recurrent or chronic nonobstructed cystitis

THREE OTHER BUILT-IN BENEFITS OF GANTRISIN®

sulfisoxazole/Roche®

3.

High solubility at average urinary pH
Gantrisin's unusual solubility is the main reason for its relatively low toxicity. In both free and acetylated forms, it is highly soluble at urinary pH values of 5.5 to 6.5, so there is no need for prophylactic alkali therapy.

4.

Rapid absorption
Gantrisin reaches its sites of action quickly. Measurable levels of the drug have been found in blood and urine within 60 minutes; in 2 to 3 hours, therapeutic levels usually have been reached.

5.

Rapid renal clearance
Gantrisin's rapid excretion rate is another reason why it is generally well tolerated. Over 50% of a single oral dose is excreted in 8 hours, over 90% in 24 to 48 hours, so there is little risk of hematuria or crystalluria, and anuria is rare. As with all sulfonamides, adequate fluid intake must be maintained. Complete blood counts and urinalyses, with careful microscopic examination, should be performed frequently.

For nonobstructed cystitis due to *E. coli* and other susceptible organisms

begin with

Gantrisin®
sulfisoxazole/Roche®

Usual adult dosage:
4 to 8 tablets *stat*
2 to 4 tablets *q.i.d.*

FINANCIAL STATEMENT FOR THE YEAR 1972

LENNERTSON & COMPANY
Certified Public Accountants
ST. LOUIS, MISSOURI 63105

January 26, 1973

Missouri State Medical Association
515 East High Street
Jefferson City, Missouri 65101

Gentlemen:

The accounts of the Missouri State Medical Association, a non-profit Missouri corporation, were reviewed for the year 1972, and a report thereon is presented together with the following exhibits:

Exhibit A	Balance Sheet
Exhibit B	Income Statement
Exhibit C-1	Statement of Commissions and Meeting Expenses
Exhibit C-2	Statement of Investments
Exhibit D	Dues Receivable and Memberships by Societies

It should be noted that members' dues and investment income are taken into income on the cash receipt basis whereas the other accounts are maintained on the accrual basis. Rentals received in advance for Annual Session exhibit space are shown as prepaid and carried forward to the year to which they apply.

Scope of Examination

The Balance Sheet at December 31, 1972 and the Income Statement for the year then ended were reviewed. Examinations or tests were made of the accounting records, in the manner and to the extent deemed appropriate, without making a detailed audit of the transaction.

Recorded cash receipts for the year were traced in total into the bank as deposits and disbursements for the period were substantiated by an inspection of paid checks, purchase invoices and other data on file.

Selective tests were made of the income and expense accounts for the period. It was noted that space in the Journal was contributed to the United States Treasury Department for bond advertising, to members for small classified ads, and to public service organizations.

Income Statement

The financial result of activities of the Association for the year 1972 was an excess of income over expenses of $18,191.85 as set forth in Exhibit B.

Balance Sheet

The financial position of the Association at December 31, 1972 is presented in Exhibit A. Comments on the larger balance sheet accounts follow:

Cash in banks, as shown by the books, was reconciled to the regular monthly bank statements and confirmations received from the depositaries. The petty cash fund was verified by physical count.

Investments with a cost of $131,321.37 were confirmed by a statement from the custodian, Mercantile Trust Co. Investment income for the year was as follows:

Interest—Certificate of Deposit	$ 6,232.43
Interest and discount on bonds	3,257.96
Dividends on Stock	2,936.34
Total Investment Income	$12,426.73

Accounts Receivable—Advertisers of $5,801.85 represent the unpaid balance due from Journal advertisers. Of this amount $5,600.29 was due from the State Journal Advertising Bureau as follows:

December 1972	$2,635.84
November 1972	2,028.35
Prior to November 1972	936.10
Total	$5,600.29

In January, 1973, a check was received paying $3,307.69 of the November and prior accounts.

Unpaid dues of $5,706.25, offset by a reserve account in like amount, represent 1972 dues of delinquent members carried at the request of local Societies. Other delinquent members were dropped from membership in accordance with the by-laws. Exhibit D presents a summary of unpaid dues and membership by Societies, as shown by the records of the Association.

During the year 1972, the Association purchased land and building at 113 Madison Street, Jefferson City, Missouri for $42,660.35. Extensive renovation was started in January, 1973, and it is anticipated that the Association will move to its new offices about May 1, 1973.

Furniture and fixtures continue to be stated in the fixed amount of $1,000. Equipment purchases, rentals and repairs for the year in the sum of $2,994.23 were charged to expense in lieu of depreciation.

The records were carefully reviewed for liabilities at December 31, 1972 and it is believed that all current liabilities of substantial amount are included in the Balance Sheet.

Exhibitors have made advance payments of $3,025.00 for annual session exhibit space and these payments will be taken into income when earned in 1973.

The excess of assets over liabilities in the amount of $196,993.45 is shown in the Balance Sheet as a "Reserve for Future Activities."

General

During the year, payments were made to and for the following sponsored organization:

Missouri State Medical Association Pension Fund—	
Employees' Retirement Insurance Pension	$ 7,729.03
Employees' Pension Plan Contribution	2,467.03
Total	$10,196.06

The association continues to provide indirect financial assistance to the Missouri State Medical Foundation (Medical Student Loan Fund).

Collections for the American Medical Association and the Missouri State Medical Foundation are made along with the Missouri State Medical Association annual dues. Following is a schedule of dues and assessments for each member in effect prior to April 9, 1972:

	Active	*Junior*
Journal	$ 3.00	$ 3.00
Association General Fund	62.00	29.50
Foundation Assessment	10.00	5.00
Missouri State Medical Association— Dues and Assessments	$ 75.00	$ 37.50
American Medical Association	110.00	110.00
Totals	$185.00	$147.50

After April 9, 1972, Junior members are interns and residents only and the dues for the Missouri State Medical Association are $10.00 and $20.00 to the American Medical Association per year.

Except for $182.50, the 1972 collections of $37,422.50 for the Missouri State Medical Foundation have been remitted along with $97.50 due from the year 1971. The $110 per member collected for the A.M.A. totalling $347,380.00 has been remitted except for $75.00.

Insurance policies were inspected and the following general insurance was in force at the close of the year:

Insurance on	*Type of Coverage*	*Amount*
Furniture and Fixtures	Fire and Extended Coverage (80% co-ins.)	$6,500
Employees	Workmen's Compensation	Statutory
Lessee's Liability	Bodily Injury	$50,000/100,000
President, Executive Secty., Office Manager, Bookkeeper, Stenographer	Fidelity Bond	$10,000
Treasurer	Fidelity Bond	$20,000
Journal Publication	Publisher's Liability ($2,500 deductible)	$500,000
Journal Publication	Advertisers' Libel ($2,500 deductible)	$500,000
Automobiles of Three Assistant Secretaries	Non-ownership—Bodily Injury	$100,000/300,000
	Non-ownership—Property Damage	$25,000
Executive Secretary Leased Auto	Non-ownership—Bodily Injury	$100,000/300,000
	Non-ownership—Property Damage	$50,000
	Non-ownership—Collision	$100 Deductible
Members and Auxiliary Members on M.S.M.A. business under age 70	Travel Accident (away from home)	$25,000/250,000 $500 Medical Expense

Subject to the comments thereon, the attached statements, in our opinion fairly present the financial position of the Missouri State Medical Association at December 31, 1972 and the result of the activities for the year then ended. The records for the year were kept in accordance with accepted principles of accounting applied on a basis consistent with that of the preceding year.

Yours very truly,
Lennertson & Co.
Certified Public Accountants

Exhibit A

Missouri State Medical Association Balance Sheet, December 31, 1972

Assets

Cash		
Mercantile Trust Co. (Treasurer's Account)	$ 9,925.35	
Central Missouri Trust Co. (Secretary's Account)	540.27	
Petty Cash Fund	25.00	
Certificate of Deposit	15,000.00	$ 25,490.62

Investments at Cost (Exhibit C-2)		
U. S. Government Bonds	$ 49,967.30	
Corporate Bonds	5,000.00	
Corporation Stocks	76,354.07	
Total (Market Value $156,990)		$131,321.37
Accounts Receivable		
Advertisers		$ 5,801.85
Mercantile Trust Co.—Investment Custodian		2,863.89
Dues Receivable—Exhibit D (See Reserve—Contra)		$ 5,706.25
Fixed Assets		
Building	$ 42,660.35	
Furniture and Fixtures (at stated value)	1,000.00	$ 43,660.35
Advances for Travel Expenses		$ 503.99
		$215,348.32

Liabilities

Accounts Payable		
Supplies and Expenses	$ 7,889.24	
Payroll Taxes	646.88	
Due Missouri State Medical Foundation	182.50	
Due American Medical Association	75.00	
Deposits	80.00	$ 8,873.62
Deferred Credit to Income		
Advance Payment by Exhibitors for 1973 Meeting	$ 3,025.00	
Advance Contribution—Annual Meeting	750.00	$ 3,775.00
Reserve for Uncollected Dues		$ 5,706.25
Reserve for Future Activities		
Balance January 1, 1972	$173,068.25	
Reinvestment of Permanent Investment Income	5,733.35	
Excess of Income over Expenses for the year 1972—Exhibit B	18,191.85	$196,993.45
		$215,348.32

Exhibit B

Missouri State Medical Association
Income Statement for the Year 1972

Particulars	*General Activities*	*Journal Publication*	*Total*
Income			
Dues Received (including $3.00 per member annually for the Journal)	$232,177.75	$11,827.00	$244,004.75
Rentals—Annual Session Exhibit Space	9,750.00		9,750.00
Subscriptions to the Journal—Nonmembers		1,193.77	1,193.77
Advertising Space—The Journal		45,696.76	45,696.76
Investments—Interest and Dividends	12,426.73		12,426.73
Collection Fees on A.M.A. Dues	3,473.05		3,473.05
Collection Fees on Taxes Withheld	48.31		48.31
Total Income	$257,875.84	$58,717.53	$316,593.37
Expenses			
Salaries	$108,210.13	$15,344.87	$123,555.00
The Journal—Paper, Printing, Etc.		48,013.49	48,013.49
Cash Discount to Advertisers		270.30	270.30
Commission on Journal Advertising		7,836.02	7,836.02
Auto Expenses	2,151.37		2,151.37
Commissions and Meeting Expense	51,627.59		51,627.59
Custodian Fees—Investments	316.50		316.50
Dues and Subscriptions	612.68		612.68
Employees' Pension Plan Contribution	8,462.73	1,733.33	10,196.06
Equipment Purchases, Rentals and Repairs in lieu of Depreciation	2,320.53	673.70	2,994.23
Insurance—General	304.34		304.34
Insurance—Blue Cross	1,680.97	311.42	1,992.39
Occupancy Expense	6,891.17	789.85	7,681.02
Postage	4,516.52		4,516.52
Professional Fees	6,429.43	1,000.00	7,429.43
Reinvested Reserve Income	5,733.35		5,733.35
Stationery, Printing and Office Supplies	4,840.19		4,840.19
Student Awards	225.00		225.00
Taxes—Payroll	4,048.53	719.25	4,767.78
Taxes—Other	544.19		544.19
Telephone and Telegraph	6,655.88	1,195.82	7,851.70
Traveling Expenses—Executive Secretary and Assistants	4,942.37		4,942.37
Total Expenses	$220,513.47	$77,888.05	$298,401.52
Excess of Income or (Expenses)	$ 37,362.37	($19,170.52)	$ 18,191.85

Exhibit C-1

Missouri State Medical Association
Statement of Commissions and Meeting Expenses
for the Year 1972

Annual Session		$19,339.92
Council		8,529.94
Delegates to A.M.A.		12,414.44
Public Affairs		5,307.79
Woman's Auxiliary		3,047.47
Commissions:		
Commission on Medical Economics, Third Party Medicine and Governmental Relations	$ 329.52	
Commission on Continuing Education and Health Manpower	1,945.20	
Commission on Medical-Legal Affairs	321.28	
Commission on Interspecialty Medicine	188.82	
Committee on Constitution and By-laws	150.30	
Committee on Planning	52.91	2,988.03
Total		$51,627.59

Exhibit C-2

Statement of Investments December 31, 1972

Description	*Bonds at Par*	*Cost*
U. S. Treasury Bond 6¼% due 2/15/78	$ 5,000.00	$ 5,026.16
U. S. Treasury Bond 5¾% due 11/15/74	35,000.00	34,946.43
U. S. Treasury Bond 6% due 11/15/78	10,000.00	9,994.71
Pacific Gas and Electric 4½% due 6/1/90	5,000.00	5,000.00
Johns-Mansville 200 shares		5,582.34
Central and Southwest Corp. 200 shares		6,345.62
American Home Products Corp. 50 shares		3,006.88
Firestone Tire and Rubber Co. 140 shares		3,771.93
Burndy Corporation 124 shares		3,676.12
Interco-Common no par 332 shares		9,997.20
J. P. Morgan and Co. 122 shares		5,161.93
International Tele. & Tele. Corp. 100 shares		6,986.25
F. W. Woolworth 140 shares		5,574.38
Bankamerica Corp. 200 shares		13,751.15
Texaco, Inc. 200 shares		6,937.26
International Paper 145 shares		5,563.01
		$131,321.37

Exhibit D-1

Missouri State Medical Association
Dues Receivable and Membership by Societies
December 31, 1972

MEMBERSHIP

Societies	*Junior*	*Active*	*Honor*	*Total*	*Unpaid Dues*
Andrew		3		3	
Audrain		18	1	19	
Barton		4	1	5	
Boone	24	165	4	193	$ 792.50
Buchanan	4	85	13	102	187.50
Butler-Wayne-Ripley	2	45	1	48	
Callaway		15		15	
Cape Girardeau	7	53	2	62	
Chariton-Macon-Monroe-Randolph		16	4	20	
Clay	11	79	5	95	225.00
Clinton		4		4	
Cole	5	50	3	58	75.00
Cooper		7		7	
Dallas-Hickory-Polk-Dade		9	1	10	
Dunklin	1	16	1	18	
Franklin-Gasconade-Warren		26		26	75.00
Grand River	2	34	3	39	
Greene	12	193	7	212	
Henry		6	1	7	
Howard		4	2	6	
Jackson	83	706	143	932	262.50
Jasper	7	68	4	79	150.00
Jefferson	5	18	2	25	
Johnson		13	1	14	

Lafayette-Ray	3	19		22	
Lewis-Clark-Scotland		1		1	
Marion-Ralls-Shelby	3	21	3	27	
Mid Missouri	1	27	1	29	75.00
Miller		2		2	
Mineral Area	1	30	1	32	375.00
Moniteau		3		3	
Montgomery		1	2	3	
Morgan	1	4		5	
North Central	2	3	2	7	
Northwest Mo.		15		15	300.00
Ozark	4	38	5	47	225.00
Pemiscot		12	1	13	
Perry-Ste. Genevieve		10	1	11	
Pettis	2	25		27	
Pike		9		9	75.00
Platte		6		6	75.00
St. Charles-Lincoln	7	49		56	
St. Louis City	161	1227	123	1511	2,401.25
St. Louis County	36	419	49	504	
Saline	1	9	1	11	37.50
Semo	4	29	1	34	300.00
South Central		15	1	16	75.00
Webster		2		2	
West Central	4	26	6	36	
Totals	393	3639	396	4428	$5,706.25 (A)

(A) Delinquent dues of members at December 31, 1972 carried at the request of local societies.

FINANCIAL STATEMENT FOR THE YEAR 1972

LENNERTSON & COMPANY
Certified Public Accountants
ST. LOUIS, MISSOURI 63105

January 27, 1973

Missouri State Medical Foundation
515 East High Street
Jefferson City, Missouri 65101

Gentlemen:

The Balance Sheet of the Missouri State Medical Foundation, a nonprofit Missouri corporation, was examined for the year 1972. The Balance Sheet at December 31, 1972 is on a cash basis and the additions for the year are set forth in Exhibit A.

Recorded receipts for the year were traced in total into the bank account as deposits and paid checks were seen for the disbursements. A direct confirmation was received from the depository in verification of the cash balances on deposit.

A summary of the loans to medical students follows:

Loans Receivable January 1, 1972	$367,844.37
Loans made during the year	70,750.00
Total	$438,594.37
Less Loan Repayments	17,540.87
Loans Receivable December 31, 1972	$421,053.50

Positive confirmations were mailed as of August 31, 1972 by the Foundation on 226 individual loans which we had received positive confirmation in 1971. On 53 new loans and 10 loans not previously confirmed we mailed positive confirmations with requests to return the confirmations direct to the auditors. Of the 289 loans, 274 were confirmed for a total of $406,816.08 out of total loans of $421,053.50. No additional loans were made after August 31, 1972. Interest income on loans is recorded on a cash basis and the amount received in 1972 was $5,154.57. Accrued interest on outstanding loans at December 31, 1972 amounted to $32,221.46 and is not included in the loan balances in Exhibit A.

Interest received on the savings account and the certificate of deposit amounted to $1,753.28. The certificate of deposit due January 6, 1973 was renewed for six months and interest of $477.08 was received on that date.

The Foundation received a check on January 11, 1973 in the amount of $15,000.00 from the Dr. Richard S. Battersby Estate which represents a partial distribution of the bequest to the Foundation. It is anticipated that the Foundation will receive a total of $28,000.00 and the contribution will be recorded in the year received.

The Missouri State Medical Foundation paid expenses for the year ended December 31, 1972 as follows:

State Registration Fee	$ 1.00
Professional Fees	965.00
Surety Bond	52.66
Printing	170.20
Total	$1,188.86

Missouri State Medical Association had paid these expenses in prior years and continues to subsidize some of the Foundation expenses.

U. S. Treasury Department form 990 and Schedule A will be prepared for the year 1972 and are due for filing by May 15, 1973. The Foundation is not liable for Federal Income Taxes as it is classified as a Tax Exempt Charitable Organization. A refund claim has been filed for $216.16 taxes paid for the year 1970.

We have examined the Balance Sheet of Missouri State Medical Foundation as of December 31, 1972, prepared on the cash basis. The examination was made in accordance with generally accepted auditing standards and include such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. Since the Balance Sheet is on the cash basis, no opinion is expressed on the attached statement as accrued interest on loans of $32,221.46 and $477.08 of accrued interest on certificate of deposit is not shown.

On September 21, 1971 the Foundation cancelled its life insurance on borrowers and became self-insured.

A reserve for losses on uncollectable loans and unpaid loans of deceased borrowers is being set up on the books at a rate of .05% of the outstanding monthly loan balances. An amount of $619.92 has been set up for 1971 and $2,450.35 for the year ended December 31, 1972. One uncollectable loan in the amount of $670.49 has been charged off against the reserve, leaving a balance of $2,399.78 at the year end. With the exceptions above, the Balance Sheet is prepared on a basis consistent with that of the preceding year.

Yours very truly,
Lennertson & Co.
Certified Public Accountants

Exhibit A

MISSOURI STATE MEDICAL FOUNDATION

Balance Sheet (Cash Basis), December 31, 1972

Assets

Cash in Checking Account	$ 26,540.40
Savings Account	21,501.44
Certificate of Deposit due Jan. 6, 1973	19,083.51
Loans Receivable from Medical Students	420,383.01
Less Reserve for Losses	(2,399.78)
Total Assets	$485,108.58

Fund Reserve

Balance January 1, 1972		$439,884.12
Cash Additions for the year 1972		
Interest on Loans	$ 5,154.57	
Interest on Bank Deposits	1,753.28	
Contributions (see below)	5,153.24	
Assessment of Members—Active $10.00; Junior $5.00	37,422.50	
Less Expenses	(4,259.13)	
Total for year 1972		$ 45,224.46
Total Reserve		$485,108.58

Contributions

Woman's Auxiliary to Jackson County Medical Society	$ 100.00
Woman's Auxiliary to St. Louis Medical Society	300.00
Woman's Auxiliary to St. Louis County Medical Society	120.00
KMOX Radio (Journalism Award from MSMA)	150.00
Max S. Franklin, M.D., St. Louis, Mo.	100.00
Woman's Auxiliary to Cole County Medical Society	100.00
John F. Bowser, M.D., Kansas City, Mo.	100.00
Woman's Auxiliary to MSMA (Fall Conference)	100.00
Woman's Auxiliary to Clay County Medical Society	717.50
Albert D. Cross, M.D., Trenton, Mo.	100.00
Miller's Medical Arts Pharmacy, Inc., Boonville, Mo.	100.00
Long's Drug Shop, Boonville, Mo.	100.00
Boonville Medical Group, Boonville, Mo.	100.00
Boone County Medical Society—Polio Fund	2,402.74
Sub-total	$4,590.24
Contributions under $100 each	563.00
Total Contributions	$5,153.24

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$316,000 PRACTICE—By Board Surgeon and Board Internist, 55 and 53 years old. Both retiring. Excellent opportunity to continue this practice. Good hospital affiliations and completely equipped office in Kansas City, Mo. Write Box 381, Missouri State Medical Association, 515 E. High, Jefferson City, Mo. 65101.

URGENT NEED—For specialists in Pediatrics, OB-GYN, ENT, Orthopedics and General Practice. Opportunities group, Associate and solo practice. Drawing area over 60,000 population. 275 hospital beds. Write President, County Medical Society, Box 311, Hannibal, Mo. 63401.

IMMEDIATE CARE PHYSICIAN—No weekends or night call. $25,000 to start. One hour from Kansas City, Mo. Write Medical Director, Thompson, Brumm & Knepper Clinic, 902 Edmond St., St. Joseph, Mo. 64502.

WANTED—House physician on internal medical service. Monday through Friday, 8 to 5. Applicant must have Missouri license. Remuneration on basis of experience. Contact Dr. L. B. Harrison, 1755 South Grand, St. Louis, Mo. Phone 314-771-0500.

FOR SALE—Kansas City Area: Excellent clinic building suitable for large volume solo or small group practice. 20 min. to downtown K.C. Financing available. Write to Box 382, Missouri State Medical Association, Box 1028, Jefferson City, Mo. 65101.

GENERAL PRACTITIONER OR INTERNIST—Needed for part-time administrative medicine three to four hours a day. Attractive pay and working conditions. Please write to Box 383, Missouri State Medical Association, 515 East High, Jefferson City, Mo. 65101.

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LEO H. POLLOCK, M.D.

Missouri Medicine in Review

FORTY YEARS AGO

The Firmin Desloge Hospital in St. Louis opened its doors to patients on February 3. The hospital is the latest addition to the group of institutions affiliated with the St. Louis University School of Medicine. That hospital, which was constructed at a cost of $2,000,000, was made possible through a donation under the will of the late Firmin Desloge, lead magnate and former student at St. Louis University, and additional donations by the Desloge family. The building has 13 floors and is one of the most modern hospitals in the country. Its capacity is 238 beds, and a clinic provides facilities for the care of outpatients. The hospital is operated by the Sisters of St. Mary in association with the School of Medicine. Dr. Ralph A. Kinsella, chief-of-staff at St. Mary's Hospital, is chief-of-staff and director of the Department of Internal Medicine at the Firmin Desloge Hospital.

The Callaway County Medical Society met at the County Hospital in Fulton on January 12 with President C. H. Christian, Fulton, presiding. As retiring President, Doctor Christian delivered the annual address and officially announced names of officers for the next year. They are President, Dr. R. N. Crews; Vice-President, Dr. C. C. Ault; Secretary-Treasurer, Dr. A. D. Ferguson; Delegate to the MSMA, Dr. T. R. Frazer; and Alternate Delegate, Dr. C. H. Christian. All are of Fulton.

TWENTY-FIVE YEARS AGO

Braving below-zero weather, 17 physicians attended a joint dinner meeting of the Caldwell, Livingston, Carroll, Grundy-Daviess, Harrison, Linn, Mercer and Ray county medical societies in Chillicothe on January 22. The meeting was sponsored by the Grundy-Daviess County Medical Society. The severity of the weather failed to curb the enthusiasm of those present in their reception of the excellent program.

The South Central Counties Medical Society held a dinner meeting at the El Patio Hotel in Cabool on January 16. The following members and guests were present: Drs. R. W. Denney and A. C. Ames, Mountain Grove; Garrett Hogg, Jr., Cabool; J. R. Womack, Houston; Leslie Randall, Licking; C. F. Callihan, Willow Springs; E. C. Bohrer and Rollin H. Smith, West Plains; Harry D. Silsby and John P. Ferguson, Springfield; and T. J. Burns, Houston. Doctor Burns was voted a member of the Society.

The Scott County Medical Society met at the Sikeston General Hospital on December 17 with the following members present: Drs. W. O. Finney, Chaffee; E. D. Urban, H. B. Throgmorton, A. P. Sargent, T. C. McClure and A. D. Martin, Sikeston. Elected to serve in 1948 were Drs. A. P. Sargent, President; E. J. Nienstedt, Vice-President; and E. D. Urban, Secretary.

TEN YEARS AGO

On January 17, Dr. and Mrs. Jackson C. Moody, Harrisonville, were commissioned for Methodist Missionary service. Doctor Moody will do medical work in a Methodist hospital in India and Mrs. Moody will do educational work.

Seventy-five physicians from St. Joseph, Northwest Missouri, Northwest Kansas and Southeast Nebraska attended the January 9 meeting of the Buchanan County Medical Society in the Empire Room of Hotel Robidoux in St. Joseph. The speaker was I. S. Ravdin, M.D., president of the American Cancer Society and surgeon-in-chief and professor of surgery at the University of Pennsylvania Medical School. Doctor Ravdin discussed "Cancer of the Colon." Dr. John B. McDaniel presided at the meeting. Dr. Charles R. Willman, program chairman, asked Dr. Wilbur P. McDonald, who had studied under Doctor Ravdin, to introduce him as the speaker.

Dr. Sol Sherry, M.D., St. Louis, was one of ten medical men named recently to receive *Modern Medicine's* Distinguished Achievement Award for contributions which are directly influencing current medical practice and thought.

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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
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skin eruptions, edema, minor menstr
irregularities, nausea and constipatio
extrapyramidal symptoms, increased
decreased libido—all infrequent and
generally controlled with dosage redu
tion; changes in EEG patterns (low-vol
fast activity) may appear during and a
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Missouri Medicine

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University of Missouri-Columbia Medical Center
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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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the compatible vasodilator... no treatment conflicts reported

The cerebral or peripheral vascular disease patient often has coexisting disease[1] which calls for another drug along with his vasodilator. It may be a hypoglycemic, miotic, antihypertensive, diuretic, anticoagulant, corticosteroid, or coronary vasodilator.

Vasodilan is not incompatible with any of these drugs—no treatment conflict has been reported. And, unlike other vasodilators, Vasodilan has not been reported to affect carbohydrate metabolism, liver function, or intraocular pressure—or to complicate treatment of diabetes, hypertension, peptic ulcer, glaucoma, or liver disease.

In fact, there are no known contraindications to the use of Vasodilan in recommended oral doses, other than that it should not be given in the presence of frank arterial bleeding or immediately postpartum.

1. Gertler, M. M., et al.: Geriatrics *25*:134-148 (May) 1970.

Indications: Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disea
3. Threatened abortion.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.

Dosage and Administration: 10 to 20 mg. three or four times daily.

Contraindications and Cautions: There are no known contraindications oral use when administered in recommended doses. Should not be give immediately postpartum or in the presence of arterial bleeding.

Adverse Reactions: On rare occasions, oral administration of the drug s been associated in time with the occurrence of severe rash. When ras appears, the drug should be discontinued. Occasional overdosage effe such as transient palpitation or dizziness are usually controlled by reducing the dose.

Supplied: Tablets, 10 mg.—bottles of 100, 1000, 5000 and Unit Dose; 20 mg.—bottles of 100, 500 and Unit Dose.

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Missouri Medicine

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acute arthritic inflammation...heat that freezes

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Tablets of 100 mg.
Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
(B)98-146-800-F (10/71)
For complete details, including dosage, please see full prescribing information.

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Sleep for 7 to 8 hours without need to repeat dosage during the night

No sleep medication has been as rigorously evaluated in the sleep research laboratory as Dalmane. Insomnia patients given one 30-mg capsule of Dalmane (flurazepam HCl) at bedtime, on average: fell asleep within 17 minutes, had fewer nighttime awakenings, spent less time awake after sleep onset, and slept for 7 to 8 hours with no need to repeat dosage during the night.

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Over multiple nights of therapy, no waning of drug effectiveness was noted. There was consequently no need to increase dosage during the study periods. It stands to reason that the fewer repeat or incremental doses needed to sustain sleep, the
lower the total cost of the sleep med
cation. Consistent effectiveness is th
measure of Dalmane (flurazepam HC
economy.

When your evaluation of insomnia indicates the need for a sleep medication, consider Dalmane—a single entity nonnarcotic, nonbarbiturate agent proved effective and relativel
safe for relief of insomnia.

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(flurazepam HCl)

When restful sleep is indicated

One 30-mg capsule *h.s.*—usual adult dosage.
One 15-mg capsule *h.s.*—initial dosage for elderly or debilitated patients.

(brain
EO
(eye mov
(muscle

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Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psych
dependence have not been report
recommended doses, use caution
ministering to addiction-prone ind
or those who might increase dosag

Precautions: In elderly and debilit
initial dosage should be limited to
to preclude oversedation, dizzines
or ataxia. If combined with other d
having hypnotic or CNS-depressa
effects, consider potential additive
Employ usual precautions in pati
who are severely depressed, or wi

pression or suicidal tendencies. blood counts and liver and kidtion tests are advised during therapy. Observe usual precauresence of impaired renal or unction.

Reactions: Dizziness, drowsitheadedness, staggering, ataxia g have occurred, particularly or debilitated patients. Severe lethargy, disorientation and obably indicative of drug intolerverdosage, have been reported.

Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.,* excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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MSMA NEWS ROUND-UP

APRIL, 1973

View of Governor's Mansion and State Capitol

MSMA expected to occupy new Headquarters by May 1

The Governor's Mansion (right in above photo) and State Capitol Building are within easy walking dis- ce from the recently purchased Headquarters Build- of the Missouri State Medical Association in Jef- on City.

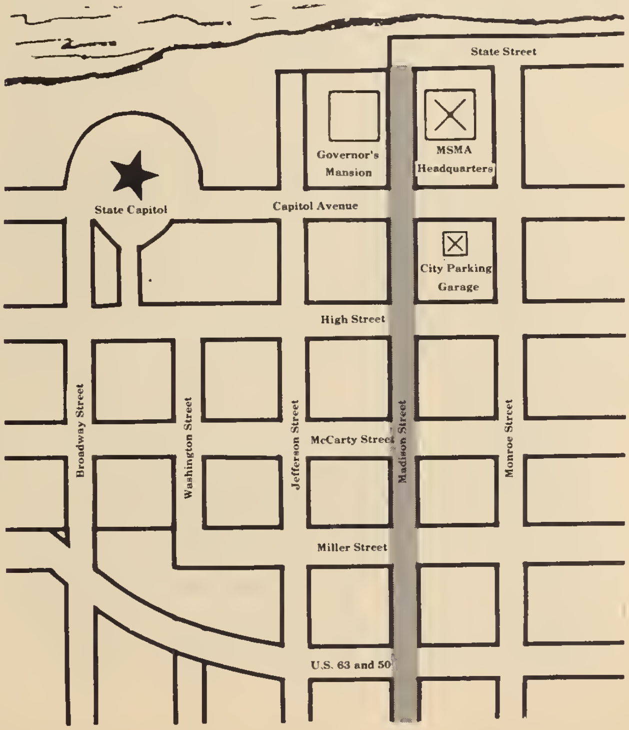
Taken from the second floor of MSMA's new home, photograph locates the MSMA office in the heart Jefferson City's governmental complex. Also, the y Parking Garage is only one-half block away.

Remodeling work is nearing completion and occu- icy is expected by May 1, 1973.

The Headquarters is an historic site in Jefferson y. It was built in 1871 by B. Gratz Brown, 20th Gov- or of Missouri. The interior of the building is be- completely remodeled while the exterior is being tored to resemble its original appearance. The ucture, located at 113 Madison Street, is situated an area of the city which has undergone extensive toration in the past few years.

The Headquarters location should be convenient to MA members visiting the Capital City and all mem- s are urged to stop in and see the offices.

The accompanying map shows access routes to MA Headquarters.


State Street
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State Capitol
Capitol Avenue
City Parking Garage
High Street
Broadway Street
Washington Street
Jefferson Street
McCarty Street
Madison Street
Monroe Street
Miller Street
U.S. 63 and 50

Senators push for RMPs

Fifteen U.S. Senators, including Sen. Thomas Eagleton of Missouri, have introduced legislation which would continue Regional Medical Programs until June 30, 1974.

Missouri Regional Medical Program and BiState Regional Medical Program, along with all other RMPs in the nation, have been ordered by the Washington office to make plans for closing out operations by June 30, 1973.

The proposed legislation would extend for one year the life of RMPs and 40 other federal health programs while each program's effectiveness is examined. President Nixon has urged Congress not to renew enabling legislation for RMPs and the other programs.

Medicare reports open to publi

All Medicare surveys and investigative reports mad
ter Jan. 31, 1973, will be open to the public.

New regulations will make available reports on
ciencies found in state surveys of hospitals, skilled nu
homes, home health agencies and independent laborat
performance evaluations on carriers, intermediaries
state agencies; performance reports on providers an
names of physicians and providers found to have
charged or convicted of submitting false claims.

Subjects of reports or surveys will have 30 days to
mit statements before the reports are released.

In the case of physicians and providers found by
mediaries to have charged excessively, names will
leased only after consultation with a professional m
society and after the person has had a chance to respon
cording to the Social Security Administration.

Columnist accuses NBC of bias on 'What Price Health?

Editor's Note

Although NBC has refused to grant equal time to the AMA to answer false accusations and to correct misinformation aired in the program, "What Price Health?," several newspaper columnists have taken up the battle. The following column by James J. Kilpatrick of the Washington Star Syndicate, Inc., is indicative of many such columns which have been published.

By JAMES J. KILPATRICK

WASHINGTON.—On December 19 of last year, NBC broadcast a documentary, "What Price Health?". On January 10, Dr. Ernest B. Howard, executive vice president of the American Medical Association, strongly complained to NBC of bias and distortion in the program; he asked for equal time to reply. On February 12, NBC responded to Dr. Howard by denying the charges, defending the show, and refusing equal time.

The exchange of correspondence is instructive. Viewed simply in terms of its subject matter, the NBC documentary offered an excellent example of what television ought to be doing: The quality of health care in the United States clearly is a matter of national concern. The subject ought to be examined, and it ought to be examined critically.

At the same time, it ought to be examined fairly. That is what a "documentary" is all about. Such a work is not intended as a work of advocacy or opinion, but as a work of fact. If documentaries are to live up to their billing, they should present evidence not on one side only, but on both sides.

* * *

THIS NBC FAILED to do. The producers of "What Price Health?" set out to make a case that American medicine is poor, that doctors are unduly rich, that patients who can't pay for medical care are likely to die for want of it, and so on. Under a flimsy veil of neutrality, the network made that case. Its writers picked case histories to support their view; they picked statistics that would adorn their presentation, and they rejected statistics that might have given a different picture. Then they put it all together, gave Ed Newman a script to read, and called it a "documentary." What it was, was an editorial.

For example, the program had Newman saying, "Good health care is hard to find." That is an editorial judgment. Hard, one might as, compared to what? As Dr. Howard pointed out, documenting his statement, 2,300,000 persons a day manage to see a physician. "The U.S. Public Health Service," Dr. Howard continues, "says that the nearest doctor is only 17 minutes from the average doorstep, and in 1969 (the last year for which data are available), 20 million house calls were made, more than half of them to families with under $3,000 annual income, the elderly, or the handicapped."

For a second example, the program had Newman sa
"If you go to an emergency ward, the average wait i
hours — and 14 hours is not unusual." That purports t
statement of fact. It was not documented. Dr. Howard
knows the meaning of documentation, replies: "The
Public Health Service found in its survey that peopl
phoned an emergency room for an appointment had t
an average of 28.7 minutes; those with no appointment
eight minutes longer."

To prove the poor quality of medical care, the NBC
mentary relied upon figures showing that 10,000 malp
suits were filed in 1970. The statement may be true —
less the suits were filed — but it is not the whole tr
Public Health study turned up 6,160 malpractice suit
year in which payments were made. The figure was tw
hundredths of one per cent of the number of hospit
charges.

* * *

NBC USED OTHER STATISTICS, taken from
Nations sources, to show that health care in the U.S.
as compared to other nations. But the Demographi
book itself cautions against such comparisons. Sta
data are not uniform, nation by nation. Neither are li
necessarily comparable.

The network spokesman, Executive Vice Pre
Richard C. Wald, refuses to admit the slightes
on NBC's part. He sees the show as "an honest,
right statement well within the bounds of resp
journalism." One of the witnesses on the progra
Alex Gerber, sees it differently: "Had I known
vance that NBC planned a highly biased and di
view of medical care in this country, I would
have consented to be a part of it."

Copies of the correspondence may be obtaine
the AMA, at 535 Dearborn St., in Chicago. The
provide documentation, if you please, of what t
tics often have in mind.

"(C) 1973. The Washington Star Syndicate, Inc."

Several State Legislators have bee
quoted recently as saying they are re
ceiving more mail this season from thei
constituents concerning proposed law
than ever before.

Physicians should remember that
letter or telephone call to their lawmaker
CAN carry impact. Letters should be ac
dressed to the individual State Represent
tive or Senator at the State Capitol Buil
ing, Jefferson City, Mo. 65101.

A Review of 1972-1973

University of Missouri-Columbia Medical Center

"One Century and We've Just Begun"

By

WILLIAM D. MAYER, M.D.
Director of the Medical Center
Dean of the School of Medicine

It is most appropriate that the review of this past year be subtitled "One Century and We've Just Begun" for during this year we are celebrating the centennial anniversary of the University of Missouri School of Medicine. Although we are only 17 years old as the currently existing four-year school, this institution does have a rich heritage of educational service to the state, dating back to the founding of the preexisting two-year school in 1872. The University of Missouri-Columbia Medical Center, thus, is a unique combination of an institution with an enviable, proud heritage and one containing the vitality of a major medical center in its adolescence. Although there is no way in a single brief article to review all or even the most significant events of the previous year, I hope that those selected will provide the reader with some flavor of the developing scope of services in patient care, education and research which the Medical Center is providing to the citizens of the state of Missouri. Those of us working in the Center do sense this unusual combination of "the old and the new" and believe that this centennial year does represent "One Century and We've Just Begun."

Patient Care

Of the multiple advances that occurred in the provision of patient care services for Missourians at the Medical Center during this past year, I will mention only five: (1) The opening of the VA Hospital (Fig. 1), (2) the establishment of the Primary Care Program, (3) the expansion of our rehabilitation center, (4) the opening of the Arthritis Center and (5) improvements in the University Hospital.

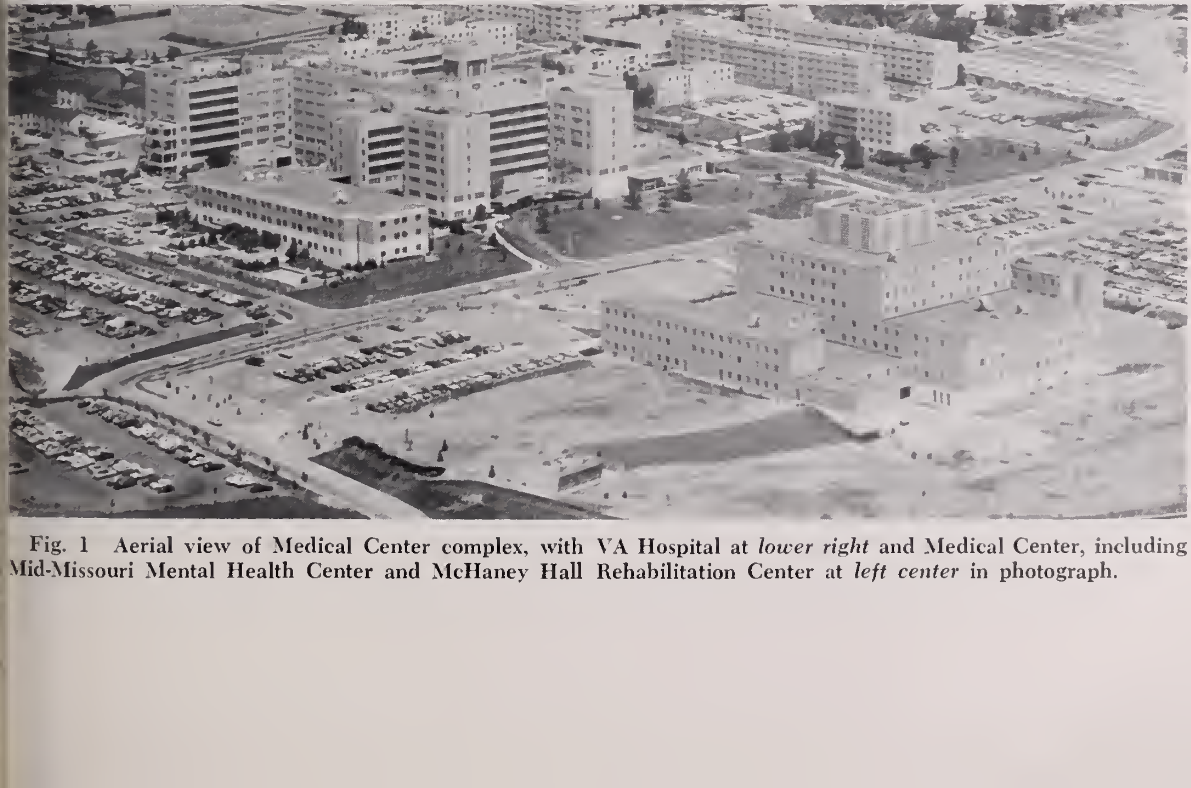


Fig. 1 Aerial view of Medical Center complex, with VA Hospital at *lower right* and Medical Center, including Mid-Missouri Mental Health Center and McHaney Hall Rehabilitation Center at *left center* in photograph.

1. In April, 1972, the long-awaited Veterans Administration Hospital accepted its first patient. Since that time, 286 beds of this 460-bed facility have been activated. It is anticipated that by July, 1974, the remainder of the hospital will be opened. This facility immediately adjacent to the Medical Center (Fig. 1) and connected to it by a tunnel beneath Stadium Road is proving to be an important resource to Missouri veterans requiring sophisticated medical treatment. It has become an integral part of the patient care, education and research activities of the Medical Center. All physicians appointed to the VA are also joint appointees of the faculty of the School of Medicine, and most serve part-time on "both sides of the street." In order to avoid needless duplication of expensive equipment and personnel, arrangements have been developed with the VA to share programmatic efforts. Thus, for example, some laboratory determinations for the entire Medical Center Complex are carried out in the VA while others are carried out only within the University Hospital.

The VA also has enabled us to expand significantly the internship and residency programs of the Center thereby providing postgraduate training to an increased number of M.D.'s, a majority of whom will practice in Missouri. It also provides an enlarged clinical base for our expanded educational programs for medical, nursing and allied health students. Finally, it has provided an opportunity to expand the clinical research activities of the Center.

2. During the year, the Family Medical Care Program was opened to provide comprehensive care to families in the greater Columbia community. This multidisciplinary effort is providing services of health maintenance and early disease detection as well as the treatment of acute and chronic illnesses of the family members participating in the program. It will serve as a major focus for expanding the residency program in Family Practice as well as a resource for students learning about primary care.

3. Construction began this past fall on a $1 million project which will renovate and add a six-story addition to McHaney Hall. This will form the focal point for improving and expanding the services in rehabilitation which we provide to the citizens of the state. The project was made possible by grants of $100,000 from the Seeing Eye Foundation of Morristown, N. J. and $900,000 from the Missouri State Section of Vocational Rehabilitation, Department of Health Education and Welfare, as well as contributions from many private donors.

On the basis of this development and the potential for rehabilitation activities within the Veterans Administration Hospital, the School was able to recruit Charles R. Peterson, M.D. as Professor and Chairman of the Department of Physical Medicine and Rehabilitation. Dr. Peterson will join the Center in June and have responsibility for the expansion of our patient care, education and research functions in Physical Medicine and Rehabilitation. Dr. Peterson comes to us from his current roles on the staff of the Methodist Hospital and the Texas Institute for Rehabilitation and Research in Houston, Tex. and as Associate Professor in the Department of Physical Medicine and Rehabilitation at Baylor University College of Medicine.

These developments will enable us not only to expand our rehabilitation services but, also, our residency program in PM&R and our other educational programs in rehabilitation: physical therapy, occupational therapy, vocational rehabilitation, recreational therapy, counseling psychology and speech therapy.

4. Also during this year, the opening of the University of Missouri-Columbia Arthritis Center was made possible by funds solicited by the Arthritis Advisory Council, comprised of 36 prominent Mid-Missouri citizens and chaired by Dr. Elmer Ellis, MU President-Emeritus. This Center, constituting a special unit where arthritis patients can benefit from care provided by a team of specialists, also represents a focal point for education of health professional students studying the nearly 100 different conditions that manifest themselves as arthritis. Further, it offers opportunities for research activities of a group of several specialists in the Center who are interested in clinical research leading to improved therapeutic modalities for these patients.

5. As I reported in my April, 1972 article for Missouri Medicine (devoted entirely to the University Hospital), two major studies of the Hospital, its structure and functions, were then under way. The reports of those efforts were completed, and we are now in the process of implementing their recommendations in order to enhance even further the quality and efficiency o our hospital services. In that the list is to lengthy to include all the changes which are i the process of implementation, I will mentio only those which might be of particular interes to the physicians of the state who utilize th services of the Hospital:

a. *Director*—On August 1, Joe S. Greathous assumed responsibility as the Director of th University Hospital. Director of the Vanderbil University Hospital in Nashville for five year prior to coming to Columbia, he brings to our University the skills of one of the best known and most highly respected teaching hospital administrators in this country.

b. *Referral Policy*—The Board of Curators in September approved a change in the referral policy of the University Hospital which permits the Hospital to accept patients not only through referral by physicians but, also, on referral by other health agencies and organizations and by direct request of the patients themselves. This has permitted greater utilization of the capabilities of the University Hospital by the citizens of the state.

c. *Communications*—Steps are being taken to improve the ease with which referring physicians and patients can contact the physicians of the Center. In June, the Medical Center went on a new Centrex telephone system enabling anyone outside the Medical Center to call directly the desired department or a specific physician. In July, we mailed to all the physicians of the state an updated copy of guidelines for referring patients, including the names of physicians by department and their new numbers. This mailing will be updated annually. We are now in the final stages of developing an internal radio-paging system so physicians can be reached anywhere in the Medical Center when they are away from their offices. These steps should go a long way toward solving communication problems which are inherent in a complex center such as this one.

d. *Air-Conditioning*—One of the major defects of the University Hospital has been that major portions of it are not air-conditioned. The University has given top priority to this matter. Contained within its current request to the Legislature is $2.1 million to complete the air-conditioning and to carry out some other much needed renovations in the Hospital and the Clinics. We hope that this session of the Legislature will approve the expenditure of these funds.

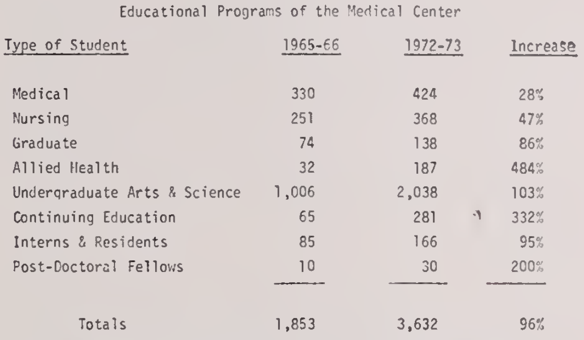
e. *Parking*—Two parking lots in the immediate proximity of the University Hospital and the Outpatient Clinics are now reserved for the parking of patients' and visitors' vehicles to improve their access to the Center.

These five steps and the many more which have been taken or are under way will improve the capacity of the University Hospital to serve the citizens and physicians of the state.

EDUCATION

As the largest single producer of health manpower for the state of Missouri, the Medical Center has continued to expand its educational programs within the limits of available resources. Last May, 98 M.D. degrees were granted to the first class representing the increase from a first-year enrollment of 85 to 100. In August, another 10% increase in medical school entering-class size was accomplished with an entering class of 110.

Fig. 2, prepared for a recent accreditation site visit to the School of Medicine by the Liaison Committee on Medical Education, shows the changes in student enrollment in the seven-year period since our last accreditation. During that time, the number of students we have been teaching has almost doubled. Of particular note is the dramatic increase in allied health students. Seven years ago, we had only a limited number of students enrolled in three small programs in medical technology, physical therapy and nutrition and dietetics. We have now expanded those programs and added baccalaureate programs in occupational therapy, radiologic technology and respiratory therapy. These figures are even more remarkable when one realizes that they represent only those students in their final two years of training in these programs, for which the Medical Center is responsible. Actually, approximately 400 students are involved when we include those who are in other schools and colleges of the University for their preprofessional training.



Educational Programs of the Medical Center

Type of Student	1965-66	1972-73	Increase
Medical	330	424	28%
Nursing	251	368	47%
Graduate	74	138	86%
Allied Health	32	187	484%
Undergraduate Arts & Science	1,006	2,038	103%
Continuing Education	65	281	332%
Interns & Residents	85	166	95%
Post-Doctoral Fellows	10	30	200%
Totals	1,853	3,632	96%

Fig. 2 Student enrollment in health sciences.

A special note also should be made concerning the increased efforts in the continuing education of health professionals, in which our faculty is participating not only in Columbia but throughout the state. The 281 figure is even more impressive when one realizes it is represented in terms of *full-time* equivalent students; in actual fact, it constitutes more than 84,000 student contact hours of continuing education for physicians, nurses and allied health personnel.

In addition to the increase in size of educational programs, there has been a corresponding increase in the *quality* of our educational offerings and the quality of our entering students. The latter is present throughout the total spectrum of entering students, but it is dramatically in evidence in the School of Medicine where the number of Missouri resident applicants has increased from 216 for the class entering in 1965 to 570 who applied for this year. This trend is continuing with 700 Missouri applicants to date for the class entering in 1973 and preliminary data which suggests that there are even more Missouri premeds in the pipeline. This trend has challenged the Medical School admission process and complicated the life of the Dean who must explain to various individuals why certain students were not accepted. However, it can only assure an ever-increasing quality of individuals entering our profession.

RESEARCH

This year, as has been the case for the past several years, research support received by our faculty from the federal government, foundations and other sources external to the University has continued to increase. Because this has occurred at a time when competition for research funds nationally has become more rigorous than ever before, it indicates an increasing national recognition of our faculty. Laboratory and clinical research ranges from studies on the molecular basis of disease to studies in preventive, rehabilitative and therapeutic medicine. A representation of the wide range of the hundreds of research projects now carried out within the Center (and their potential value to the state of Missouri) is contained in the following two examples of grants funded during this past year.

In September, we received five-year approval not only for the continued funding but for the expansion of the activities in our General Clinical Research Center with an award to fund it at an annual rate of approximately $350,000. More than 1,500 patients have been admitted to the Clinical Research Center during the past five years and have participated in such diverse projects as studies of the natural history of diabetes mellitus and effects of various types of therapy; hemodynamic assessment of surgical procedures for hypertension; effects of trace metals on vascular disease; relations of the renin-angiotensin-aldosterone system to human hypertension; metabolic effects resulting from bowel bypass procedures for obesity; effects of various chemotherapeutic programs on the molecular biology of tumors; and other studies. The CRC provides not only mechanisms for assuring future improved health care for Missourians, as a result of its research findings, but also provides opportunities for medical students and house officers to see at firsthand high quality clinical research so they will be better prepared to interpret clinical research findings in the literature in the future.

Another research grant awarded this year involves study of factors affecting distribution of physicians in rural Missouri. This study by individuals in rural sociology, medical sociology and medical faculty will attempt to determine the factors in individual student's and physician's backgrounds and educational experiences which influence their selection of career choices in medicine in both specialty and geographic location. Data developed from these studies should be extremely helpful to the Medical Center in our attempts to increase the number of physicians practicing in rural Missouri.

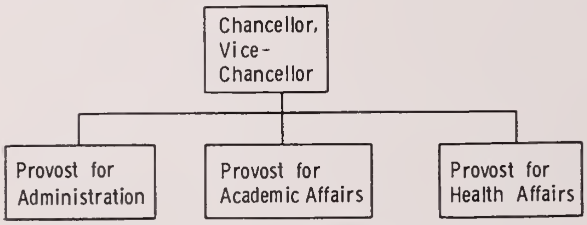

Chancellor, Vice-Chancellor
Provost for Administration
Provost for Academic Affairs
Provost for Health Affairs

Fig. 3 Reorganization of Chancellor's Office.

ADMINISTRATION

Two major reorganization proposals approved by the University's Board of Curators at its September meeting directly affect the University Medical Center. The first proposal established a reorganization of the Chancellor's office and the second a reorganization relating to health affairs on the Columbia campus.

The diagram in Fig. 3 depicts the new organization of the Chancellor's office.

A new position of Vice-Chancellor has been created, along with positions for three provosts (administration, academic affairs and health affairs). The Chancellor and these four individuals will constitute the major central administrative group for the University of Missouri-Columbia. The inclusion of health affairs activities within the executive staff of the Chancellor clearly acknowledges recognition by the administration that education, service and research in the health area constitute a key role in University affairs.

Dr. Walter Daniel, former President of Lin-

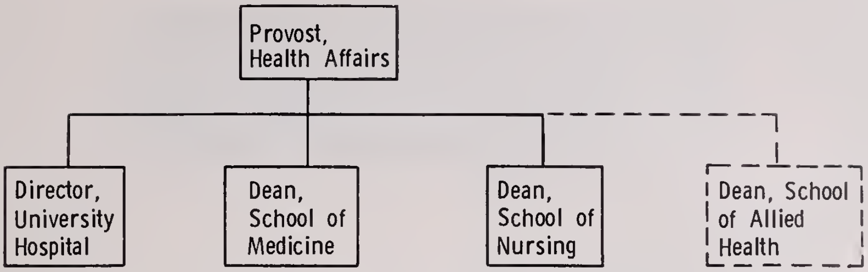


Fig. 4 Reorganization of Health Affairs.

coln University, has been appointed Vice-Chancellor and Dr. John F. McGowan, formerly Dean of Extension, has been appointed Provost for Administration.

In October, the Chancellor appointed a ten-member Search Committee, headed by Dr. McGowan, to help select a Provost for Health Affairs. The Committee was charged "to identify at least four candidates who, in the judgment of the full committee, are fully qualified for the position of Provost for Health Affairs, and advise the Chancellor regarding their qualifications, it being understood that at least two of the candidates shall be affiliated with programs in institutions other than the University of Missouri." At this writing, the Committee is continuing its efforts.

Another Search Committee is currently considering candidates for Provost for Academic Affairs.

The second reorganization plan approved by the Curators relates to the Health Affairs activities on the Columbia campus. That reorganization is depicted by the diagram in Fig. 4.

As previously mentioned, Joe S. Greathouse, formerly Director of Vanderbilt University Hospital, was appointed Director of the University Hospital.

Dr. Ruby Potter, Associate Dean of the School of Medicine in charge of the School of Nursing, is due to retire in September, 1973. Thus, a Search Committee for her replacement had been appointed prior to approval of the reorganization. That Committee, which I chair, is currently reviewing candidates for the Deanship of the School of Nursing.

The Chancellor has appointed a campus-wide committee to review the possibilities of the establishment of a School of Allied Health. If a school is developed, a Search Committee for that Dean will be implemented to fit into the organizational structure outlined above.

I feel that both of these are significant steps forward in the orderly growth and development of the Medical Center and health affairs on the Columbia campus. The current administrative structure is simply no longer applicable to an activity of the size and complexity of the Medical Center.

Another important administrative step was taken on December 15, 1972 with the appointment of Giulio J. Barbero, M.D., nationally known for his work in pediatric gastroenterology and nutrition research for children, as Chairman for the Department of Pediatrics. For the past six years, Dr. Barbero has been Chairman of Pediatrics at Hahnemann Medical College in Philadelphia where he was President of the Philadelphia Pediatrics Society. He replaces Dr. Robert L. Jackson, who has been Chairman since the establishment of the four-year school in 1956. Dr. Jackson will remain as Professor in the Department, concentrating on his primary interest in diabetic children.

CONCLUSION

It is, of course, not possible to review in so brief an article all of the important "happenings" of the university medical center in the course of a year. I have outlined a few of them. I hope this is sufficient to illustrate for the reader some of the progress and pride felt by the author. In this, the centennial year of Missouri's School of Medicine, the motto "One Century and We've Just Begun" seems to be appropriate. I am extremely proud of the accomplishments of our academic and nonacademic staff during this past year as they have met the many patient care, educational and research responsibilities presented to them.

Please feel free to contact me if you feel there are specific ways in which we can continue to improve our efforts. For, in the final analysis, it is only with your advice, counsel and support that we can continue to serve the purpose to which we are all dedicated—the health needs of the citizens of the state of Missouri.

WASHINGTON

The American Medical Association took to Congress its protest against retention of controls over physicians in phase III of the economic stabilization program.

In a statement to the Senate Committee on Banking, Housing and Urban Affairs, which was considering a one-year extension of statutory authority for the program, the AMA cited the "highly discriminatory" treatment of physicians and other health care providers under the program despite their cooperation and "laudable record of self-restraint."

"We have questioned the wisdom of many of the policies which have been initiated in the various regulatory phases since August of 1971," the AMA statement said. "In particular, we have objected to certain aspects because of the highly discriminatory treatment accorded health care providers. This discrimination has been even heightened under phase III of the Administration's program. On Jan. 11, 1973, mandatory wage and price controls were suspended for most sectors of the economy but were continued to be enforced upon health care providers. Our opposition to this discrimination does not stem from self-interest, nor is it based solely upon invidious comparison with those segments of the economy no longer subject to mandatory control. The question we raise here is more fundamental. It is submitted that the capricious imposition of controls on select groups only serves to frustrate the basic objectives of the stabilization program itself. If regulation is to be effective, it must recognize the interrelationships existing within the economy in general. Without such accomplishment the intent of the law will be frustrated.

"Physicians' fees constitute a relatively small percentage of the gross national product (less than 1.5%) and they constitute a small factor in the consumer price index weighting structure (less than 1.8%). Given the relatively slight impact of this factor upon the economy as a whole, the suspension of mandatory controls would not work counter to the goals of the economic stabilization program. Conversely, continued controls could not be expected to yield meaningful restraints throughout the balance of the economy. The continuation of mandatory controls, therefore, does not appear to be consistent with the letter or spirit of the economic stabilization act.

"The Congress found in enacting the economic stabilization act that prompt judgments and actions by the executive branch of the government were necessary to meet extreme economic fluctuations. The Congress, however, directed the president to conduct such emergency programs in a fair and equitable manner and to make such adjustments as may be necessary to prevent gross inequities. Standards established under an emergency program must comply with the criteria of section 203 (b) of the act which provides, among other things, that such standards shall be 'generally fair and equitable' and that the program must call for 'generally comparable sacrifices by business and labor as well as other segments of the economy.'

"We emphasize that this statutory authority presumes the existence of an economic emergency and authorizes a coherent and comprehensive governmental response. Only a system of price stabilization effective at all levels of production and consumption and having equitable incidence within the economy should be countenanced. To invoke controls for one activity without the reasonable expectation of achieving a result having universal application is to employ the statute in a punitive manner. Punitive treatment of health care professionals is neither sanctioned by law nor warranted by the record.

"It is apparent from the physician component of the consumer price index that the medical community has fully complied with efforts to curb inflation during phase I and II of the new economic policy. In the period from August, 1971 to December, 1972, the all items category, as measured by the consumer price index, rose at a rate of 4.2%, the all services component at the rate of 4.6%, while physicians' fees rose only 3.2%. In the period from November, 1971 to December, 1972 (i.e., during the 14 months of phase II), the all items category rose 3.8%, the price of all services rose at a rate of 3.8% while physicians' fees rose at a rate of 2.6%. For the calendar year 1972, physicians' fees increased only 2.1%. This percentage is below the 2.5% annual goal set by the Health Services Industry Committee of the Price Commission and represents a rate of increase of only one third the rate of increase prior to phase I. Since the goal of the economic stabilization program was to halve the rate of inflation, the record achieved by physicians surpassed considerably the expectations of the program. Thus, there is no indication that physicians' fees have been a major inflationary factor during the course of the stabilization program, and it is difficult to discern any rationale for imposing mandatory controls in this sector. Continued controls do not appear to be the just reward for this record of compliance. We submit that this precedent could have a demoralizing effect on other industries which might well conclude that a record of restraint does not preclude imposition of a continued regimen of control. . . .

"All activities require the basic factors of production, and all of us must compete in the marketplace for these necessary goods and services. It will become increasingly difficult for the health care services to obtain needed material and manpower unless the stabilization program is administered in a nondiscriminatory fashion."

AMA Congress on Medical Ethics to Be Held on April 26-28 in Washington

The Judicial Council of the American Medical Association has announced that the Fourth National Congress on Medical Ethics will be held on April 26-28 at the Washington Hilton Hotel in Washington, D. C.

Distinguished speakers and panelists will discuss ethical issues of growing concern to medical professionals and society from the more traditional, such as fee splitting and solicitation, to the more current, such as genetic engineering and behavior control.

Among the specific subjects to be discussed will be "What Is Medical Ethics?," "How Does the Student or the Resident or the Nurse See Medical Ethics?," "The Teaching of Medical Ethics," "Medical Ethics and the New Biology" and "Voluntarism vs. Compulsion."

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Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are an
nausea, vomiting, and dizziness. Less frequently, diarrhe
epigastric distress, pruritus, weariness, drowsiness, gid
and headache have occurred. Rarely, tinnitus, hyperirrita
numbness, abnormal sensation in eyes, blurring of visio
xanthopsia; hypotension, collapse; enuresis; transient ri
cephalin flocculation and SGOT; perianal rash, cholestas
parenchymal liver damage; hyperglycemia; transient leu
malodor of the urine, crystalluria, hematuria; appearanc
Ascaris in the mouth and nose. Hypersensitivity reactio

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clude: fever, facial flush, chills, conjunctival injection, ngioedema, anaphylaxis, skin rashes, erythema multiforme ncluding Stevens-Johnson syndrome), and lymphadenopathy. **upplied:** Chewable tablets, containing 500 mg thiabendazole, boxes of 36, strip packaged, individually foil wrapped; uspension, containing 500 mg thiabendazole per 5 cc, in ottles of 120 cc.

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addendum

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INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

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available for the management of nausea,
niting, and dizziness associated with mo-
n sickness.

NDICATIONS. Based on a review of this drug by
he National Academy of Sciences-National Research
Council and/or other information, FDA has classified
he indications as follows:
Effective: Management of nausea and vomiting and
lizziness associated with motion sickness.
Possibly Effective: Management of vertigo asso-
iated with diseases affecting the vestibular system.
Final classification of the less than effective indica-
ions requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12th-15th day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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medical melange

Notes of interest from Here . . . . and There

Dr. C. Howe Eller, St. Louis County health commissioner since 1959, has retired (effective April 1) and will become the first executive director of Health Delivery Services, Inc., a federally-funded, independent agency that will work to improve community health care services in the St. Louis area. As health commissioner, Dr. Eller started a number of new programs, including family planning and maternity clinics and agreements with municipalities for environmental health services. His office also supervised air pollution control. He is on the faculties of Washington University and St. Louis University schools of medicine.

Dr. James E. Crockett, Kansas City, was elected secretary of the American College of Cardiology at the 22nd Annual Scientific Session of the organization in February. A total of 9,500 cardiologists, heart surgeons and guests attended the meeting in San Francisco.

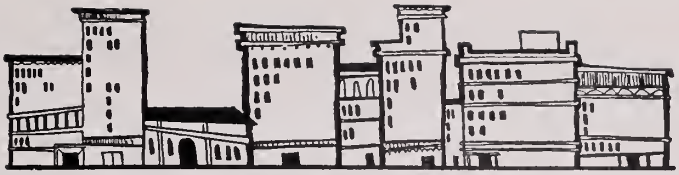
Dr. Fred C. Reynolds, St. Louis, was the subject of an interesting feature story in the *St. Louis Globe-Democrat* on February 24-25. A professor of orthopedic surgery at Washington University's School of Medicine and Barnes Hospital, Dr. Reynolds has served for ten years as the football Cardinals' orthopedist and more recently, also the team's physician. In addition to complimentary comments by various team members and colleagues, the subhead for the story stated that ". . . Dr. Fred C. Reynolds, the Big Red's great orthopedist and team physician, has been one of life's total professionals for more than 40 years."

Dr. Carroll P. Hungate, Kansas City, who recently retired as plant physician for Ford Motor Co. in Kansas City, was the guest speaker at a luncheon meeting of the Rotary Club in Marshall recently. In his address, Dr. Hungate cited the important role an industrial physician has in our society and described his experience as a plant physician.

Dr. Clement E. Brooke, Columbia, has been selected by the American Academy of Pediatrics to serve as a Head Start consultant in Columbia. He is one of more than 600 consultants selected to evaluate the medical aspects of Head Start programs in nearly 2,000 communities throughout the United States, Puerto Rico, Virgin Islands and the trust territories in the Pacific. Under this service, the AAP provides consultants who advise and offer technical assistance to the Head Start programs at the state and local level.

The Cooper County Hospital in Boonville has elected medical staff officers to serve for 1973. They are **William A. Abele,** M.D., chief-of-staff; **Edward T. Humphreys,** M.D., vice chief-of-staff; and **J. F. Jonas,** D.D.S., secretary. Appointees to other positions were **Byron M. Stuart,** M.D., chief of medicine; Edward T. Humphreys, M.D., chief of obstetrics-gynecology; **Willard B. Avery,** M.D., chief of pediatrics; and J. F. Jonas, D.D.S., chief of dental surgery.

From the Medical Schools



ST. LOUIS UNIVERSITY

Five Soviet heart experts visited the St. Louis University Medical Center on February 19-20 as part of a U.S.-U.S.S.R. Health Exchange Agreement and U. S. visit on Management of Ischemic Heart Disease. Hosting the St. Louis visit was *Dr. V. L. Willman,* a member of the four-man U. S. ischemic heart expert team which visited Russia for two weeks last September. He is professor and chairman of the Department of Surgery at the School of Medicine.

While here, the Soviet delegates toured the St. Louis University Hospitals, making special stops at the Cardiac Catheterization Laboratories directed by *Dr. J. F. Gerard Mudd,* who is associate professor of internal medicine at the School of Medicine and President of the St. Louis Heart Association. They also toured many other areas of the Hospitals and Medical Center. In addition, they visited Washington University's Coronary Care unit.

The visiting Russian delegates began their U. S. visit at Bethesda, Md., where their principal hosts during their five days of conferences at the National Heart Institute were *Dr. Theodore Cooper,* NHLI Director, and *Dr. Peter Frommer,* associate director for Cardiology of the NHLI Division of Heart and Vascular Diseases. Dr. Cooper received both the M.D. and Ph.D. degrees at St. Louis University. Dr. Frommer is U. S. Chairman for the Cooperative Project on Management of Ischemic Heart Disease. The U.S.S.R. Project Chairman, *Professor Skhkvatsabaya,* received an award from the American College of Cardiology in San Francisco where all the Soviet delegates and Dr. Willman were present before their trip to St. Louis University.

Soviet and American heart experts are planning a cooperative research attack against the greatest cause of death in both countries—coronary heart disease. Experts of both nationalities, including Dr. Willman of St. Louis, met at the National Heart and Lung Institute on February 4-8 in a project which aims, over a period of years, to evaluate and compare angina and heart attack disability treatment methods that have been developed in each country separately until now.

Seated *(left to right)*: Dr. Igor K. Skhkvatsabaya, Director of Myasnikov Research Institute of Cardiology; Dr. V. L. Willman, professor and chairman of the Department of Surgery, St. Louis University School of Medicine; Dr. Lidiya F. Shvetsova, Chief Specialist of U.S.S.R. Ministry of Health; and Dr. Zavan L. Dolapchyan, Institute of Cardiology of the Ministry of Health of Armenia. Standing *(left to right)*: Dr. Nikolay A. Mzur, Researcher, Myasnikov Research Institute of Cardiology, and Dr. Robert A. Grigoryants, Researcher, Myasnikov Research Institute of Cardiology.

An immediate goal of the Project members who met in the U. S. last month was to establish standard definitions, criteria and methods as a common ground for experts of both nationalities to discuss, plan and eventually conduct cooperative studies of the ischemic heart disease therapies in both countries. It is envisioned that detailed plans of action incorporating these standards and major points of agreement will be ready for implementation by Dec. 31, 1973.

A conference on Medical Education for Comprehensive Patient Care was sponsored by the School of Medicine on February 19-20. *Honorable William Roy,* M.D., member of Congress from Kansas, a well-known advocate of comprehensive group practice, spoke as a physician-congressman on current issues. *Mr. Alphonso Lynch,* president of the St. Louis Regional Comprehensive Health Planning Agency (ARCH) and Executive Director of the Yeatman Community Corp., was the keynote luncheon speaker on February 20. The Conference concluded a year's work by a faculty/student committee on the subject of educating future physicians in the elements of managing the total needs of a patient. *Dr. Max Pepper,* chairman of the Department of Community Medicine, was project director of the conference.

Dr. Vernon L. Nickel, chief of surgical services, Rancho Los Amigos Hospital, and clinical professor of orthopedic surgery, University of Southern California, will deliver the 28th annual Hanau Loeb Lecture sponsored by Phi Delta Epsilon medical fraternity on April 5 at 12-noon. His lecture titled "Orthoneering-Engipedics" is open to the medical public. His address will cover modern technology aiding the disabled. The lecture will be held in Glennon Hall.

Dr. Robert E. Olson, professor and chairman of the Department of Biochemistry, School of Medicine, was scheduled to discuss the value of Vitamin E on John Chancellor's "Nightly News Roundup." A film interview by NBC-TV correspondent Catherine Macken was to be shown in late February or the first part of March.

UNIVERSITY OF MISSOURI-COLUMBIA

An institutional grant of $30,000 has been awarded to the University of Missouri-Columbia by the American Cancer Society. According to the donor organization, its primary purpose is to serve as "seed" money to permit the initiation of new projects on novel ideas, especially by young investigators.

Eight investigators on the Columbia campus will receive some of these funds in pursuing their research. They are looking for new approaches to the cause and treatment of cancer through basic scientific research.

A campus committee comprised of seven professors in medicine, radiology, botany, plant pathology and veterinary microbiology made the selection of projects to be supported in the coming year by the young investigators. *Dr. Charles E. Mengel* is chairman of the committee; other members are *Drs. Gwilym S. Lodwick, John Grunau, Daniel F. Millikan, Richard Dorn, Raymond W. Loan* and *Reginald Pugh.*

Recipients of the grant funds are *Drs. Leonard Brubaker,* assistant professor, Department of Medicine; *Robert Carolla,* chief resident, Department of Medicine; *Thomas J. Prendergast,* director, Division of Community Health Science; *Beryl Ortwerth,* biochemist, Department of Ophthalmology; *John D. David,* assistant professor of biological science; *Hans K. Adldinger,* associate professor of veterinary microbiology; *Nasrollah Hakami,* associate professor of pediatrics; and *Edwin M. Kaiser,* associate professor of chemistry.

A chance to gain additional training in modern techniques has been given to medical technologists throughout Missouri for more than four years via traveling workshops sponsored by the Office of Continuing Education and Extension of the University of Missouri Medical Center. These workshops, under the direction of the Department of Pathology, are designed "To bring what is current and useful into this very rapidly changing area of medical laboratory science," according to Dr. *A. Matthew Gottlieb,* instructor in pathology.

One such workshop, entitled "Current Topics in Microbiology," was presented on February 15 and 16 at St. Mary's Hospital in Jefferson City. It was designed to bring current thinking and antibiotic usage related to this group of microscopic disease-causing, rod-shaped bacteria to medical technologists, Dr. Gottlieb explained. He pointed out that experience has indicated that laboratory workload doubles every ten years and the technology which accompanies this increased workload changes about every seven years.

WASHINGTON UNIVERSITY

Washington University School of Medicine has appointed *Elmer B. Brown, Jr.,* M.D., to the newly-created position of associate dean for continuing medical education.

Dr. Brown, professor of medicine, has served as director of the Division of Hematology for nine years. He will relinquish this position in July, but will continue his teaching, clinical practice and research in this area.

His new activity will be to coordinate continuing training for all medical specialties. Meetings and courses will be designed to help physicians keep abreast of changes and improvements in the profession.

Dr. Brown

Dr. Brown attended the University of Missouri for one year and then Oberlin College, where he received the A.B. degree in 1946. He earned the M.D. degree, cum laude, from Washington University in 1950. Following internship and residency at New York's Presbyterian Hospital, Dr. Brown served two years in the U. S. Navy before returning to Washington University for postgraduate training in hematology.

In 1955, he was appointed to the Department of Medicine faculty as an instructor. In 1957-1959, he was appointed a Public Health Service Special Research Fellow in enzyme biochemistry at the National Heart Institute. Upon his return to St. Louis he was promoted to assistant professor. In 1964, he was named associate professor, and in 1971, professor.

Continuing Education Coming Events

April 5-6	**Clinical Approach to Allergic Disorders** Medical Center Continuing Education, St. Louis University Miller Hall, Firmin Desloge Hospital St. Louis
April 5-6	**25th Annual Midwest Cancer Conference** American Cancer Society, Kansas Division, Inc. Wichita, Kan.
April 11-12	**19th Annual Urology Seminar** Continuing Education, University of Missouri-Columbia and Kansas City Urological Society Alameda Plaza, Kansas City
April 13	**Symposium: Infectious Diseases** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan.
April 23-25	**Symposium: Anesthesiology** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan.
May 3-4	**Spring Clinical Conference—What's New and Review of Selected Gastro-Intestinal Diseases** Continuing Education, M.U. School of Medicine VA Hospital, Columbia
May 10-11	**Symposium: Inhalation Therapy** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan.
May 14-15	**Symposium: New Advances in Electrocardiography** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan.

Postgraduate Course in Clinical Allergy

A basic course in serial dilution titration technique and food allergy diagnosis and treatment will be held at the Alameda Plaza Hotel in Kansas City on April 16-19. Sponsor is the Greater Kansas City, Missouri, Chapter of the American Academy of Family Physicians. The program is acceptable for 30 prescribed hours by the AAFP. Registration fee of $165 includes three luncheons and the banquet on Tuesday. Advance registration is requested. For registration forms, write to James W. Willoughby, M.D., Suite 1505, Traders National Bank Bldg., 1125 Grand Ave., Kansas City, Mo. 64106.

In Memoriam

R. Lee Hoffmann, M.D., 631 West Park, Olathe, Kan., a graduate of Kansas University, 1915; member Jackson County Medical Society; age 83; died Dec. 22, 1972.

Edwin L. Pfuetze, M.D., Plaza Parkway Bldg., Kansas City, a graduate of the University of Kansas, 1942; member Jackson County Medical Society; age 59; died Dec. 31, 1972.

Robert S. Terrill, M.D., 1216 W. 60th Terr., Kansas City, a graduate of the University of Kansas, 1952; member Jackson County Medical Society; age 50; died Jan. 27, 1973.

William L. Macon, Jr., M.D., 7200 Manchester Ave., St. Louis, a graduate of the University of Tennessee, 1929; member St. Louis Medical Society; age 67; died Feb. 1, 1973.

Francis A. Carmichael, Jr., M.D., 5841 High Dr., Shawnee Mission, Kan., a graduate of the University of Pennsylvania, 1934; member Jackson County Medical Society; age 63; died Feb. 8, 1973.

John J. Hammond, M.D., 2821 N. Ballas Rd., St. Louis, a graduate of St. Louis University, 1926; member St. Louis Medical Society; age 73; died Feb. 15, 1973.

Crofford O. Vermillion, M.D., 600 S. Kingshighway, St. Louis, a graduate of Washington University, 1947; member St. Louis Medical Society; age 54; died Feb. 17, 1973.

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PRESCRIBING INFORMATION

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.

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New York, New York 10017

Clean sweep

PINWORMS 0
ROUNDWORMS 0
STAINS 0
ARTHUR

with a single dose of Antiminth (pyrantel pamoate) ORAL SUSPENSION

Highly effective against worm and roundworm

Non-staining to teeth oral mucosa on ingestion, to ols, clothing, linen

Simple dosage with a gle-dose regimen: 1 cc. per lb. body weight (1 tsp./50 lb.; ximum dose, 4 tsp.)

Well-tolerated, based on clinical studies*

Pleasant-tasting, easy-to-take, caramel-flavored oral suspension

Economical, because one prescription can treat the entire family

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A division of Pfizer Pharmaceuticals
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ANTIMINTH®
(pyrantel pamoate)
equivalent to 50 mg. pyrantel/ml.
ORAL SUSPENSION

While Antiminth is highly effective against pinworms and roundworms, the illustration is not meant to imply 100% efficacy.
*Data on file at Roerig.
Please see prescribing information on facing page.

ELLIS FISCHEL STATE CANCER HOSPITAL and the Associated CANCER RESEARCH CENTER

Semiannual Professional Program

Thyroid Cancer, Hypercalcemia and Related Problems

May 12, 1973 **Ramada Inn, Columbia**

8:30 AM Registration (no fee).

9:00 AM *Introduction,* Robert L. Glass, M.D., Surgeon, EFSCH.

9:05 AM *The Incidence, Accuracy and Meaning of Serum Calcium Abnormalities Determined by SMA-12,* Robert C. Ahlvin, M.D., Pathologist, Missouri Delta Community Hospital, Sikeston.

9:30 AM *The Overall Evaluation of Hypercalcemia Including Parathyroid Hormone Assay,* Bernard M. Jaffe, M.D., Surgeon, Washington University School of Medicine, St. Louis.

10:00 AM Questions and Answers.

10:15 AM Coffee Break.

10:35 AM *Management of Hyperparathyroidism,* Ronald L. VanderMolen, M.D., Chief Resident in Surgery, University of Missouri-Columbia School of Medicine.

11:00 AM *Management of Hypercalcemia Due to Cancer,* Egbert R. Borja, M.D., Internist, EFSCH.

11:20 AM Panel Discussion on *Hypercalcemia,* Dr. Glass, Moderator, and Drs. Ahlvin, Borja, Jaffee and VanderMolen.

12 NOON Lunch.

1:00 PM *Classification of Thyroid Tumors,* Carlos Perez-Mesa, M.D., Chief Pathologist, EFSCH.

1:15 PM *Serum Calcitonin in the Early Diagnosis and Follow-Up of Patients With Medullary Carcinoma of the Thyroid,* C. Stratton Hill, Jr., M.D., Internist, M. D. Anderson Hospital & Tumor Institute, Houston, Tex.

1:45 PM *The Thyroid Nodule—Evaluation and Treatment,* M. S. DeWeese, M.D., Professor and Chairman, Department of Surgery, University of Missouri-Columbia School of Medicine.

2:20 PM *Thyroid Cancer,* George Crile, Jr., M.D., Emeritus Consultant, General Surgery Department, Cleveland Clinic, Cleveland, Ohio.

3:00 PM Coffee Break.

3:15 PM Panel Discussion of *Thyroid Cancer,* Dr. Glass, Moderator, and Drs. Crile, DeWeese, Hill and Perez-Mesa.

4:00 PM Adjourn.

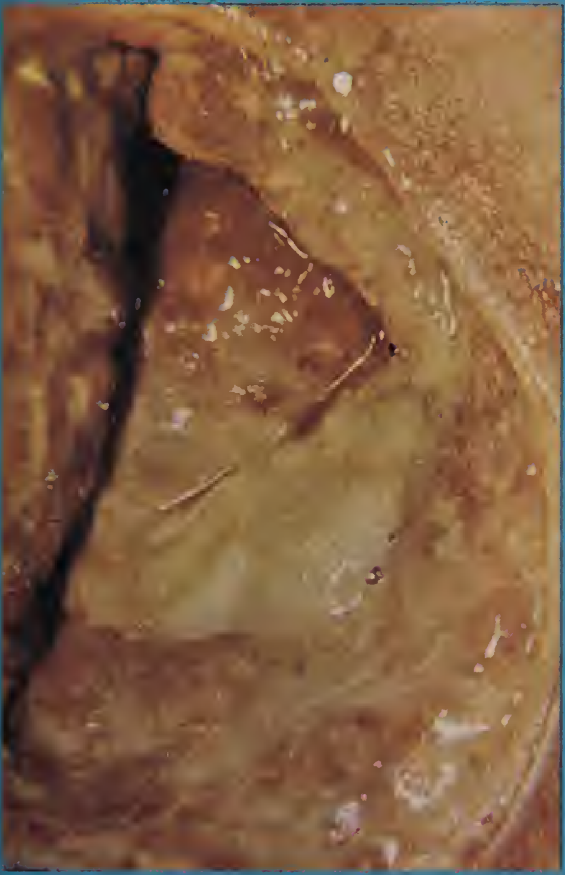
The EFSCH-CRC Professional Program is open to any interested health professional. Application has been made for five elective AAFP credit hours. For additional information, write to Robert L. Glass, M.D., Ellis Fischel State Cancer Hospital, Business 70 at Garth Ave., Columbia, Mo. 65201.

This program is sponsored in part by the John Modlin Memorial Lecture Fund established at the Cancer Research Center.

Decubitus Ulcers Yield to

Travase® Ointment

brand of **Sutilains**



Before treatment, necrotic matter coated the inner surfaces of this decubitus ulcer.

After six days of TRAVASE therapy, debridement is nearly complete and granulation evident.

nctive Therapy—Observe Its Effects in 48 hours
n the recommended nursing technique is
wed without deviation, this procedure can
rate visible improvement within 48 hours of
ment. If no dissolution of slough occurs by then,
er application is unlikely to be rewarding
neck for break in procedure, usually due to use
eansing or antiseptic agents which impair the
tiveness of the enzyme in TRAVASE).

cal observation and photos by Kathleen Brough
am, M.D., Marion County Home, Indianapolis, Ind.

se see next page for prescribing information

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ravase® Ointment brand of Sutilains

PLICATION TECHNIQUE: TRAVASE Ointment is indicated as an adjunct established methods of wound care for biochemical debridement. It ssolves and facilitates the removal of necrotic tissues and purulent udates.

RAVASE enzymes are selective. Virtually inactive on viable tissue.

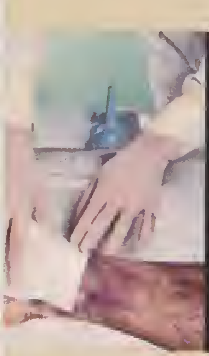
hen this recommended nursing technique is followed without deviation, is procedure can generate visible improvement within 48 hours . . .

r being irrigated) oughly cleanse and ate the wound area using sterile water or sodium ride solution. Be sure to ise the wound of any eptics or heavy-metal acterial agents which interfere with the ne activity.

Thoroughly soak the wound area. Where practical, tubbing or showering is suitable. Or wet soaks with gauze pads may be used. Remember to avoid chemical cleansing agents which may interfere with the therapy.

With a sterile cotton swab or finger cot, apply a very thin layer of TRAVASE Ointment. The ointment spreads easily and only a small amount is needed (a small dab of ointment will cover an area as big as the back of a hand).

Be sure, though, to rub the ointment well into every crack or crevice of the wound and overlap the surrounding skin one-fourth to one-half inch beyond the area to be debrided—to be sure of complete coverage.



y loose, wet dressings, oughly soaked in sodium ride solution or sterile r to the area to be ided only.

Cover the moist dressings with an occlusive wrap (Saran wrap, Telfa Pads, or other plastic wrappings) to keep wound site moist. Do not extend occlusive wrap over ½ inch beyond area to be debrided.

When changing dressing, gently wipe away the dissolved material. Repeat the complete dressing procedure, including application of TRAVASE Ointment, four times daily.

ulcer shown in these photos is simulated on a model in order to demonstrate correct TRAVASE application technique.

o: FLINT LABORATORIES
Division of Travenol Laboratories, Inc.
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Deerfield, Illinois 60015

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______Additional Information on TRAVASE® Ointment (brand of Sutilains)

______In-service training program

______Comment ______________________________

DESCRIPTION: TRAVASE® (brand of sutilains) Ointment is a staril preparation of proteolytic enzymes, elaborated by **Bacillus subtilis**, hydrophobic ointment base consisting of 95% white petrolatum an polyethylene. One gram of ointment contains approximately 82,000 units* of proteolytic activity.

ACTION: TRAVASE Ointment selectively digests necrotic soft tissu proteolytic action. It dissolves and facilitates the removal of necro tissues and purulent exudates that otherwise impair formation of granulation tissue and delay wound healing (4).

At body temperatures these proteolytic enzymes have optimal acti the pH range from 6.0 to 6.8.

INDICATIONS: For wound debridement (1,2)—TRAVASE Ointment indicated as an adjunct to established methods of wound care for biochemical debridement of the following lesions:

Second and third degree burns,
Decubitus ulcers,
Incisional, traumatic, and pyogenic wounds,
Ulcers secondary to peripheral vascular disease.

CONTRAINDICATIONS: Application of TRAVASE (brand of sutilain Ointment is contraindicated in the following conditions:

Wounds communicating with major body cavities,

Wounds containing exposed major nerves or nervous tissua,

Fungating neoplastic ulcers,

Wounds in women of child-bearing potential—because of lack laboratory evidence of effects of TRAVASE upon the develop

Do not permit TRAVASE Ointment to come Into contac the eyes. In treatment of burns or lesions about the head or nack, the ointment inadvertently come into contact with the eyes, the ey be immediately rinsed with copious amounts of water, preferably

PRECAUTIONS: A moist environment is essential to optimal activi enzyme. Enzyme activity may also be impaired by certain agents. several detergents and antiseptics (benzalkonium chloride, hexachlorophene, iodine, and nitrofurazone) may render the subst indifferent to the action of the enzyme (3). Compounds such as th containing metallic ions interfere directly with enzyme activity to slight degree, whereas neomycin, sulfamylon-streptomycin, and p do not affect enzyme activity. In cases where adjunctive topical t has been used and no dissolution of slough occurs after treatman TRAVASE Ointment for 24 to 48 hours, further application, becaus interference by the adjunctive agents, is unlikely to be rewarding.

In cases where there is existent or threatening invasive infection, appropriate systemic antibiotic therapy should be instituted concu

Although there have been no reports of systemic allergic reaction humans, studies have shown that there may be an antibody respo humans to absorbed enzyme material.

ADVERSE REACTIONS: Adverse reactions consist of mild, transia paresthesias, bleeding and transient dermatitis. Pain usually can controlled by administration of mild analgesics. Side effects seve enough to warrant discontinuation of therapy occasionally have o

If bleeding or dermatitis occurs as a result of the application of T (brand of sutilains) Ointment, therapy should be discontinued. No toxicity has been observed as a result of the topical application c TRAVASE Ointment.

Dosage and Administration

STRICT ADHERENCE TO THE FOLLOWING IS REQUIRED FOR E RESULTS OF TREATMENT

1. Thoroughly Cleanse and Irrigate Wound Area with sodiur or water solutions. Wound **MUST** be cleansed of antisept heavy-metal antibacterials which may denature enzyme o substrate characteristics (e.g., Hexachlorophene, Silver Benzalkonium Chloride, Nitrofurazone, etc.).
2. Thoroughly moisten wound area either through tubbing, or wet soaks (e.g., sodium chloride or water solutions).
3. Apply TRAVASE Ointment in a thin layer assuring intima with necrotic tissue and complete wound coverage exten ¼ to ½ inch beyond the area to be debrided.
4. Apply loose wet dressings.
5. Repeat entire procedure 3 to 4 times per day for best ra

How Supplied

3P3002 TRAVASE Ointment is supplied sterile in one-half ounc (14.2 g.) containing 82,000 casein units of sutilains per hydrophobic ointment base.

The ointment must be stored under refrigeration at 2° to 10° C (35° to 50° F).

References

1. Garrett, T. A. **Bacillus subtilis** protease, a new agent for debri Clin. Med. **76**: 11-15, 1969.

2. Hesterberg, R. (Necrosis treatment on fermentative basis). Do dissertation from the Chirurgical Clinic of the University of Muni Dissertation Printing: Charlotte Schoen, Munich, 1964. (Ger.)

3. Howes, E. L. The healing of the burn may be hindered by its therapy. 20th Cong. Soc. Inter. Chir., Rome, Italy, September 14-

4. Prytz, B., Connell, J. F., Jr., and Rousselot, L. M. **Bacillus sub** protease in the digestion of burn eschar. Clin. Pharmacol. Thera 347-51, 1966.

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*A casein unit is the amount of enzyme required to produce the optical density at 275 mμ as that of a solution of 1.5 mcg. tyros after the enzyme has been Incubated with 35 mg. of casein at 3 one minute.

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Maybe the patient's self-diagnosis is right. He could have hay fever. But that bright red nasal mucosa, along with the thick discharge and excoriation around the nares, strongly suggests that the main problem is a cold. Hay fever or another form of allergic rhinitis may or may not be an underlying factor.

If a complete history and examination rule out allergic rhinitis, the long-term outlook will be a lot more favorable than his own "diagnosis" would have indicated.

But right now, whether he's got allergic rhinitis or a cold, he's suffering from the same irritating symptoms of drip, congestion and stuffiness. Try DIMETAPP EXTENTABS®. They're formulated to relieve these symptoms without much chance of causing drowsiness or overstimulation. Your patients will appreciate the 24-hour relief they can get from just one tablet every 12 hours.

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Whether it's a cold or an allergy, Dimetapp Extentabs® effectively relieve stuffiness, drip and congestion.

INDICATIONS: Dimetapp Extentabs are indicated for symptomatic relief of allergic manifestations of upper respiratory illnesses, such as the common cold, seasonal allergies, sinusitis, rhinitis, conjunctivitis and otitis. In these cases it quickly reduces inflammatory edema, nasal congestion and excessive upper respiratory secretions, thereby affording relief from nasal stuffiness and postnasal drip.

CONTRAINDICATIONS: Hypersensitivity to antihistamines of the same chemical class. Dimetapp Extentabs are contraindicated during pregnancy and in children under 12 years of age. Because of its drying and thickening effect on the lower respiratory secretions, Dimetapp is not recommended in the treatment of bronchial asthma. Also, Dimetapp Extentabs are contraindicated in concurrent MAO inhibitor therapy.

WARNINGS: *Use in children:* In infants and children particularly, antihistamines in overdosage may produce convulsions and death.

PRECAUTIONS. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.

ADVERSE REACTIONS: Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis, and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric distress.

HOW SUPPLIED: Light blue Extentabs in bottles of 100 and 500.

Dimetapp Extentabs®

Dimetane® (brompheniramine maleate), 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.

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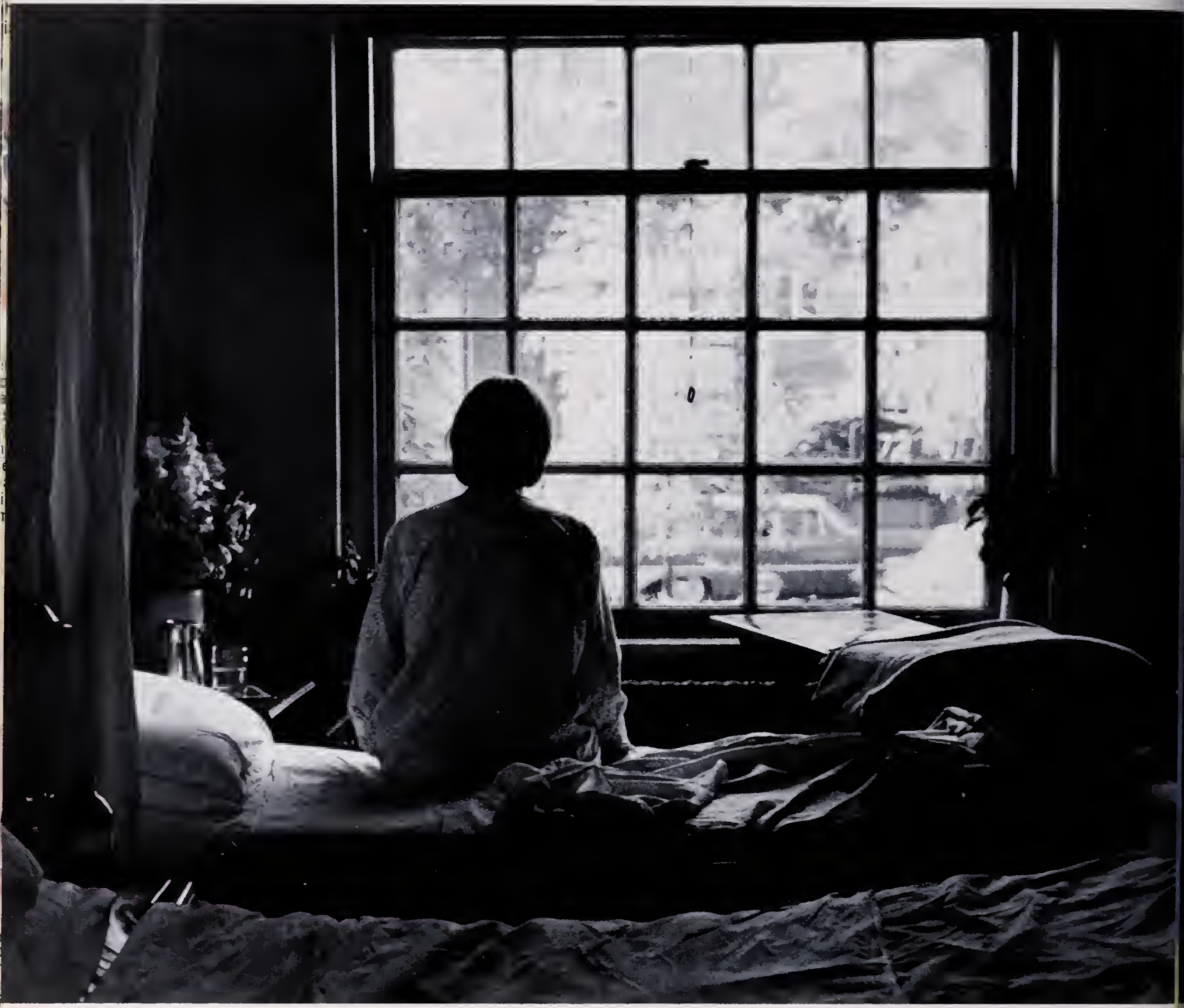
when pain goes on... and on... and on–



For the patient with a terminal illness, PAIN past, present, and future can dominate his thoughts until it becomes almost an obsession. The more he is aware of the pain he is now experiencing, the more difficult it is to erase his memory of yesterday's pain, and to allay his fearful anticipation of tomorrow's pain.

Surely the last thing this patient needs is an analgesic containing caffeine to stimulate the senses and heighten pain awareness. A far more logical choice is Phenaphen with Codeine. The sensible formula provides ¼ grain of phenobarbital to take the nervous "edge" off, so the rest of the formula can help control the pain more effectively. Don't you agree, Doctor, that psychic distress is an important factor in most of your terminal and long-term convalescent patients?

the analgesic formula that calms instead of caffeinates

Phenaphen® with Codeine

Phenaphen with Codeine No. 2, 3, or 4 contains: Phenobarbital (¼ gr.), 16.2 mg (warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg ; Phenacetin (3 gr.), 194.0 mg ; Codeine phosphate, ¼ gr (No. 2), ½ gr. (No. 3) or 1 gr (No. 4) (warning: may be habit forming)

Indications: Provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products, excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed: Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

Ⓒ III Phenaphen with Codeine is now classified in Schedule III, Controlled Substances Act of 1970. Available on written or oral prescription and may be refilled 5 times within 6 months, unless restricted by state law.

A H Robins Company, Richmond, Va. A·H·ROBINS

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sodium warfarin
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Volume 70, Number 4—April, 1973

Missouri Medicine

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BARBARA BUCHANAN, M.D., IAN M. THOMPSON, M.D.
and **R. MARK KIRK, M.D.,** *Columbia*

Gender Identity Problems in the Sexually Ambiguous Child

THE FAIRLY RECENT CLARIFICATION of many of the biological factors involved in aberrations of sexual development has stimulated an expansion of the interest of psychiatrists and psychologists in sex and gender deviations. This has given rise to the establishment of gender identity clinics in several centers where interdisciplinary teams of psychiatrists, urologists, pediatricians and obstetricians can evaluate and assist patients with disturbances in gender identity.

According to Stoller,[1] normal development of sex and gender is dependent upon three interrelated factors: sexual identity, gender identity and gender role.

Sexual identity is biologically or genetically determined and is assigned at birth based on five factors: (1) the configuration of the external genitalia, (2) the internal genitals, (3) chromosome configuration, (4) hormonal composition and (5) secondary sexual characteristics or pubertal hormones. In normal development, these form a cohesive pattern so that the physician has no doubt about the sex of the newborn child.

Gender is a term that has psychological or cultural rather than biological connotations. It is related to whether a person thinks of himself as belonging to one sex or another. It is felt that by 40 months of age, a child says to himself, "I am a boy" or "I am a girl" and, thus, has a gender identity. Gender identity is thought to be a learned behavior produced by three factors: (1) the parents' attitudes toward the infant's sex, (2) the infant's growing awareness of its external genitalia and (3) possibly an unknown biological force. The most important factor in establishing gender identity is felt to be the parental attitude toward the biological sex of assignment.

Gender role refers to the overt behavior a person displays in society, a role which is either masculine or feminine. This is learned behavior and is usually not at variance with gender identity and sex.

PURPOSE

In infants with ambiguous external genitalia, the biological sex cannot always be determined by the appearance of the external genitalia and mistakes of sex assignment can have devastating psychologic effects in later years when the proper sex is discovered. We became interested in studying gender identity in children with ambiguous external genitalia and have tried to determine whether or not these children might have gender identity problems. It was hypothesized that if the child's parents had some doubt as to the child's sex, these feelings would be conveyed to the child, and that with this doubt and the ex-

The authors conducted a study of gender identity in children with ambiguous external genitalia to determine whether or not these children have gender identity problems. They discuss results of interviews with both children and parents, the areas of questioning and observation and their conclusion. Formerly an Instructor in Psychiatry at the Mid-Missouri Health Center, Dr. Buchanan is now in private practice in Kansas City. Dr. Thompson is Chief of Urology at the University of Missouri School of Medicine. Dr. Kirk, who completed his residency in Urology at the School of Medicine, is serving at Scott Air Force Base, Ill.

istence of ambiguous external genitals, the child might be expected to exhibit gender identity problems.

Sample

Children born with ambiguous external genitalia who had been studied by the Section of Urology of the University of Missouri School of Medicine were the substrate of the investigation. A letter explaining the purpose of our study was mailed to the parents of these children along with an application form, if they were interested in being included in the study. The sample size was limited by the number of replies received from the parents. Many families could not be located or failed to respond. Our final group comprised only nine patients; four cases of female pseudohermaphroditism (adrenogenital syndrome), four cases of male pseudohermaphroditism and one case of true hermaphroditism. Three other children, two true hermaphrodites and one female pseudohermaphrodite (A-G Syndrome) not formally studied due to parental resistance, who have been observed frequently during followup visits through the years will be discussed since their gender roles appear clearly established.

Four children with the adrenogenital syndrome had been correctly assigned as to sex at birth. All were under hormonal control. All the male pseudohermaphrodites had been raised as boys since infancy and all had undergone surgery to align their genital abnormalities to their sex of rearing. The true hermaphrodite studied was thought to be a female until he was seven months old, at which time his parents were told he was genetically a boy. They changed his name and have raised him as a boy since that time. One child not formally included in the study was a female pseudohermaphrodite (A-G Syndrome) raised as a boy until an appendectomy revealed normal female internal genitalia. These were ablated and his urethra was reconstructed since his gender role was so obviously masculine. Of the other true hermaphrodites not formally evaluated, one was raised as a boy. He had a hypospadias repair which strictured and at reconstruction, the true situation became apparent. He has continued to function well in the male role. The other child was raised as a female despite parental doubt as to true sex and has functioned well in this role after ablation of the male gonad.

An interview with each child and mother in the study was conducted using a standard data schedule of topics adapted from Ehrhardt *et al.*[2] An attempt was made to keep the interviews flexible and to find out as much as possible about the family situation and the effect the patient's condition has had upon it. The primary areas of questioning in interviews were toy, playmate and clothing preference, aggressivity, role play and satisfaction with sex role.

In addition to the interview, each patient over four years of age was given the Missouri Children's Picture Series (MCPS).[3] Each parent was given the Missouri Children's Behavior Check List to complete.

Most of the interviews were conducted in the patient's homes.

Findings

From the interview data on toy, playmate and clothing preference, there were no answers given that would indicate a serious gender identity problem. In one 9-year-old male pseudohermaphrodite, it was felt that his toy and playmate preferences were not as strongly masculine as those for most 9-year-old boys. The MCPS profile for this boy was one standard deviation below the normal for 9-year-old boys. This would indicate some feminization but of minimal degree.

The data on aggressivity showed, in general, more evidence of fighting behavior for those children raised as boys than for those raised as girls. There was one exception to this. One male pseudohermaphrodite failed to show fighting behavior probably as a result of immobilization by a spinal condition rather than a lack of aggressivity. The MCPS profile would indicate that this boy is aggressive, as evidenced by an elevated aggression score, but that he must express this aggression in ways other than fighting.

Role play in all cases was consistent with the sex of rearing and the children appeared content with their gender role.

The other areas of questioning, which were physical energy expenditure, the tomboy-sissy dimension and sexual curiosity, were of less value in evaluating gender identity but were consistent with the findings already discussed.

Except for those cases already mentioned, the MCPS scores on the masculinity-femininity scale were unremarkable. In general, the MCPS profiles were not grossly abnormal and did not show any evidence of severe emotional disturbances. The major exceptions to this were the previously mentioned male pseudohermaphrodite whose masculinity-femininity score was low and a 13-year-old boy with adrenogenital syndrome whose profile indicated possible minimal cerebral dysfunction.

Discussion

The results of our interviews with children born with sexual ambiguity and with their mothers indicate that these children do not have gender identity problems. This finding supports the concepts of other authors[4–6] that the sex of rearing is the most important determinant of gender identity. If the parents have no doubt about the sex of their child and if the rearing is thus unequivocal, the child should feel no ambivalence about his true sex and should have no problem forming a proper gender identity despite a growing awareness that the external genitalia may be grossly deformed. Two of the children who were not formally studied but who were observed for a number of years were well aware of their genital deformities. The parents of the female with adrenogenital syndrome believed the child was a male as did the child who was a little league shortstop at the time the appendectomy revealed the true sex. With hormone supplementation, he has continued to do well in his male role. The situation in the true hermaphrodite raised as a male is entirely similar. The parents of the other true hermaphrodite were never clearly told and were not sure of the actual sex of the child, but they steadfastly raised her as a girl and she has given no evidence that she is not happy in this role.

It was quite clear from our interviews that the parents in the present study had no doubt about the sex of their child once the physician told them what it was. The rearing of these children in regard to their sex had been consistent and unequivocal. Even the parents who were first told their child was a girl readily accepted the sex change at seven months. They changed the baby's name and did not doubt the decision. They did not tell the child about the early confusion about his sex and raised him as a boy from seven months of age. Thus, the older children in our study exhibited no signs of gender identity confusion and those who were three years of age or younger should not be expected to have gender identity problems in the future.

Summary

Stoller has stated that gender identity initially depends upon sex assignment and that it becomes relatively fixed by around age of two-and-a-half or three. He believes that gender identity is independent of all variables except the parents' acceptance of the assigned sex. This concept would seem to be substantiated by the present study, in that all the parents interviewed had accepted the sex assigned to their child by the doctors. In some cases, this was in spite of gross genital anomalies and extreme genital ambiguity. The parents have consistently reared their children in the assigned sex and, consequently, the children do not seem to have problems with gender identity.

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HUGH E. STEPHENSON, JR., M.D., WILLIAM D. BLESSING, M.D.
and **EDGAR L. LICHTI, Ph.D.,** ***Columbia***

Traumatic Arteriovenous Fistulae

Case Report

This case report illustrates the value of the Doppler ultrasonic flowmeter in clinical evaluation and intraoperative monitoring of arteriovenous fistulae, particularly of multiple origin. The authors are from the Department of Surgery, University of Missouri School of Medicine.

The accurate preoperative evaluation of arteriovenous fistulae, particularly of multiple origin, is difficult. Particularly, is it easy to overlook small arteriovenous connections during surgery. The purpose of this report is to emphasize the considerable value of the Doppler ultrasonic flowmeter in the preoperative delineation of the problem and to call attention to the assistance it provides the surgeon in seeking out and removing arteriovenous fistulae during the course of the operative procedure. The Doppler ultrasonic flowmeter provides an excellent adjunct to the usual means of delineating arteriovenous malformations prior to surgical correction by use of arteriography techniques. A number of the limitations of arteriography, however, do not apply to the Doppler ultrasonic flowmeter. For example, the latter is an inexpensive, rapid and easily available technique which is noninvasive and provides an excellent means of following the progress of an arteriovenous fistula, both preoperatively and intraoperatively.

We have used the Doppler ultrasonic flowmeter in conjunction with arteriography as a means of better defining the arteriovenous fistula and its possible area of infiltrative hemangiomatous tissue in the patient with congenital hemangioma.[1] We have been able to determine size changes in fistulae created for hemodialysis with the Doppler and have applied the techniques used to determine the relative flow in the traumatic fistula.[2] The ultrasonic flowmeter provides the operator with an audible hemodynamic portrayal of the involved vasculature. It is atraumatic and may be used time and time again without patient discomfort and without the associated morbidity of angiography.

The opportunities to observe arteriovenous fistula are frequent. Traumatic arteriovenous fistula may be caused by penetrating wounds due to stabbing, gunshot or flying objects, such as glass in automobile crashes. They also may be caused by inclusive ligation of arteries and veins to control bleeding. Like all arteriovenous fistulae, they represent an abnormal communication between an artery and a vein and they may occur in an interfascial plane. Because arterial pressure is higher than venous pressure, the arteriovenous fistula will act as a short circuit, in relation to the heart, by means of the diversion of arterial blood into venous channels. When the diversion of arterial inflow is great, there will be compromise of the distal vascular tree.

Hemodynamic alterations caused by fistulae depend, of course, on the magnitude of the fistula; a small fistula may have little to no noticeable effect while a larger fistula will eventually cause an increase in total blood volume, increased cardiac output, increased heart rate and increased heart work. The final result may be left ventricular hypertrophy or congestive heart failure or both. It is necessary to control and surgically correct fistula of significant size before irreversible damage occurs to the heart and the extremity, if the latter is involved.

The Doppler ultrasonic flowmeter is an electronic device that makes use of a modification of a principle first described by Djohann Christian Doppler, an Austrian mathematician and physicist of the 19th century. The principle has to do with changes in the pitch of sound as the distance between the source and listener is rapidly varied. The Doppler instrument consists of an oscillator, a probe (transducer) which contains two piezoelectric crystals with identical natural resonating frequencies; one crystal acts as an output and when contact is made with tissue (using a lubricating gel as an ultrasound conductor), the signal from the output crystal is reflected or backscattered from intravascular particulate matter in motion at a slightly different frequency than the original output frequency. The frequency shift, which is directly proportional to the velocity of the intravascular particulate matter in motion, is detected by the second crystal. The frequency shift (f_d), expressed in cycles per second (cps), is amplified and may be presented as an audio or video (analog) signal.

Case Report

This was the first admission to the Medical Center of this 21-year-old coed who presented with a history of trauma to her right foot about ten years previously when she had stepped on a nail. No abnormalities were noted at that time and she had an uneventful recovery from the experience. Approximately three to four years later, she began to notice numbness and tingling in the toes of her right foot on prolonged standing. At that time, the diagnosis of an arteriovenous malformation in the right foot was made. In the fall of 1971, there was a noticeable thrill in the foot and arteriography demonstrated the primary lesion. She was operated on at another hospital for the arteriovenous malformation of the foot, but her symptomology did not significantly subside.

Six months after the first operation, the young lady was admitted to the University of Missouri Medical Center. A Doppler ultrasonic examination of the right foot was made to delineate and identify the arteriovenous malformations present in the foot. Fig. 1 is a medial view of the foot, and this gives an impression of the depth of the arteriovenous malformations. Fig. 2 shows the areas of arteriovenous malformations noted on the dorsal surface of the foot. Fig. 3 delineates the main area of fistula activity as viewed from the sole of the foot. Thus, the Doppler findings confirmed that multi-channeled fistulae were present in the foot.

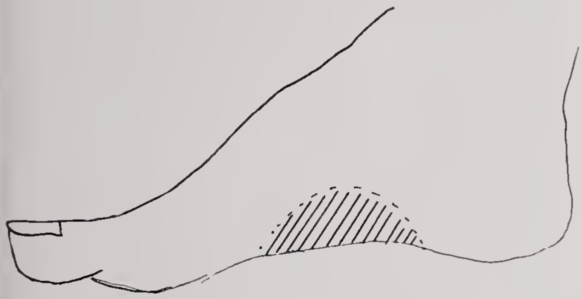

Fig. 1 Areas of greatest concentration of arteriovenous activity in right foot (medial view).

On Aug. 3, 1972, the patient was taken to the operating room. General anesthesia of penthrane and nitrous oxide given by mask with an oral airway was used. An incision was made in a longitudinal manner over the skin of the sole of the foot and extended through the subcutaneous tissue and the palmar aponeurosis. The main body of the fistula was identified by gradually dissecting through the muscle layers of the base of the foot and exposing the lateral plantar arch. The lateral plantar artery was identified. The flexor digitorum longus and the adductor hallicus were retracted medially. Finally, beneath the flexor digitorum longus and the flexor hallicus longus, a large marble-size aneurysmal structure with a multiplicity of feeding vessels, appearing to be arterial in nature, was located. These "feeders" were divided and ligated as were several branches of the lateral plantar artery which appeared to have direct venous connections when examined with the sterile Doppler probe. When all of the branches and the aneurysmal sac had been removed, no further abnormal arteriovenous activity was noted in the area.

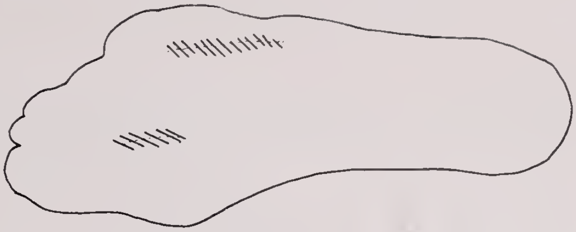

Fig. 2 Areas of arteriovenous malformation activity in top of foot.

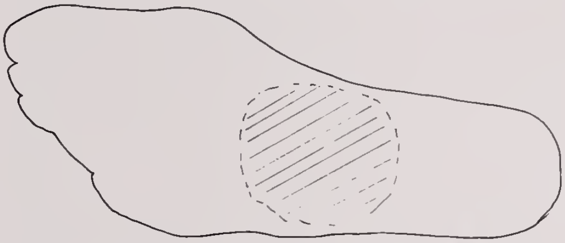

Fig. 3 Primary arteriovenous malformation activity in right as seen from the bottom of the foot.

Nevertheless, on the dorsum of the foot, as seen in Fig. 2, two areas of arteriovenous activity were detected by the ultrasonic flowmeter. Two incisions were made in a longitudional fashion to explore these areas. The first was made medially over the base of the big toe and the second was made over the base of the small toe. Both areas were explored, and a multiplicity of small arteriovenous abnormalities were located and ligated as guided by the Doppler ultrasonic flowmeter.

Postoperative examination with the ultrasonic flowmeter demonstrated that the superficial and deep veins in the lower extremity no longer had pulsatile flow nor were the superficial veins distended. Digital flow was noted in the vascular pads of all of the patient's toes which were pink and had excellent capillary fill. Prior to surgery, the toes on the patient's right foot were cold and exhibited little to

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G. ROSS, JR., M.D., I. M. THOMPSON, M.D., S. L. HOUSER, M.D.
and **M. F. MULLENS, M.B., B.C.H.,** ***Columbia***

Radiographic Features of Renal Pelvic Carcinoma

DURING AN EIGHT-YEAR PERIOD ending in 1972, 15 patients with carcinoma of the renal pelvis were seen at the University of Missouri Medical Center. Renal angiography was performed in seven instances. We would like to emphasize the application of angiography in the diagnosis of this entity.

The general patient population was in keeping with the experience noted in other series, the disease being most prevalent in the elderly men. There were ten men and five women with an age range of 50 to 83 years and a mean age of 69.

Hematuria was the most common presenting complaint, occurring in 13 patients. One third of the patients had flank pain and three of 15 had a palpable mass. Three individuals had an antecedent, synchronous or subsequent epithelial tumor which involved the bladder or the contralateral renal pelvis or ureter. The renal pelvic tumors in these patients were all of a relatively low grade and stage. However, other urothelial tumors in the same patients were not necessarily of the same low grade and stage. It is of interest that none of the three patients with epidermoid carcinoma had a history of stones or long standing infection in the involved kidney.

Although the diagnosis of renal pelvic carcinoma usually can be established from urographic studies, the authors emphasize the application of angiography in circumstances in which there is diagnostic uncertainty. Their study shows that angiography has the capacity to enhance the precision of preoperative assessment and aid in management of the patient. The authors are from the University of Missouri Medical Center where Dr. Ross is Professor of Surgery (Urology) and Chief Surgeon of the Kidney Transplant Team; Dr. Thompson is Professor of Surgery and Chief of the Urology Section; and Dr. Mullens is Assistant Professor in the Department of Radiology. Formerly a resident at the Medical Center, Dr. Houser is now serving in the U. S. Navy in Puerto Rico.

Five patients had regional or distant metastases when first seen and their mean survival of eight months was substantially less than the 23-month survival in those who initially presented with disease which was presumably localized, but who subsequently died.

DIAGNOSIS

Although urine cytologies were suggestive or conclusive for malignancy in five of eight instances, the presumptive diagnosis was based upon various radiographic procedures (Fig. 1).

RADIOGRAPHIC STUDIES
(15 Patients)

Study	*Number*	*% Abnormal*
Excretory urography	15	93
Retrograde pyelography	14	100
Renal angiography	7	100
Renal scan	5	80

Fig. 1

Excretory urography was abnormal in 14 instances and probably abnormal in the 15th. The characteristic filling defects of pelvic tumor noted in two patients were less common than features such as pyelocalyceal distortion, dilatation or absence of excretion of contrast media found in the more extensive lesions (Fig. 2).

Retrograde pyelograms, performed in 14 patients, were clearly abnormal, although the interpretation of these studies did not particularly augment the findings noted on excretory urography with the exception of those instances where there was no excretion on the excretory study. Thirteen urographic evaluations demonstrated pyelocalyceal distortion with filling defects, compression, calyceal obliteration and stretching, with or without proximal ureteral compression or deviation. In two instances, there was

PYELOGRAPHIC FINDINGS
EXCRETORY UROGRAPHY
(15 Studies)

Finding	*Number*
Non-function	7
Pyelocalyceal distortion (compression, filling defect, etc.)	10
Ureteropelvic obstruction	1

Fig. 2

complete obstruction to the passage of contrast media at the ureteropelvic junction. In general, the definition of the abnormality was more precise on retrograde study and, frequently, was strikingly revealed as noted in the retrograde study in a 72-year-old woman with a large pelvic defect (Fig. 3).

In two patients, the repetition of urography at intervals of two or three months eventually provided the correct diagnosis when the source of urinary tract bleeding was not clarified at the time of initial evaluation.

Angiography was performed in seven patients, the most pressing indication for the procedure being some residual diagnostic uncertainty following other radiographic studies, i.e., the presence or absence of a mass in the kidney or the differential diagnosis between renal pelvic carcinoma, renal parenchymal carcinoma or an inflammatory process.

The angiographic features of invasive renal pelvic carcinoma were fairly consistent in this group of patients (Fig. 4) since all the renal masses were clearly identified as being avascular. The avascular area was not always precisely outlined. Frequently, there was a mottled, patchy appearance to the nephrographic phase, but this was totally at variance with the avascularity observed in benign cystic disease as noted in this 62-year-old woman with a left upper pole mass (Fig. 5). Equally important in the differential diagnosis was the lack of tumor staining in the mass which tended to eliminate renal carcinoma as a diagnostic possibility. Another relatively common finding was vascular encasement with straightening of vessels, vascular pruning and failure of arborization, suggesting an infiltrating process with encirclement of intrarenal vessels.

ANGIOGRAPHIC FEATURES
(7 Studies)

Finding	*Number*
Avascular mass	6
Renal infarction (mid and upper pole)	1
Extraparenchymal vessels	1
Vascular encasement	3
No classical tumor stain	7

Fig. 4

Hypertrophy of the pelvic artery has been described as a characteristic of a large noninvasive renal pelvic tumor. Although all the patients in this series in whom angiograms were performed had invasive tumor, enlargement of the pelvic artery was noted in only one instance when it occurred in conjunction with extraparenchymal vessels streaking from the lower pole of the kidney in a patient with an epidermoid carcinoma.

In general, angiography was felt to be useful enough in patient management to justify its continued inclusion in the evaluation of the pa-

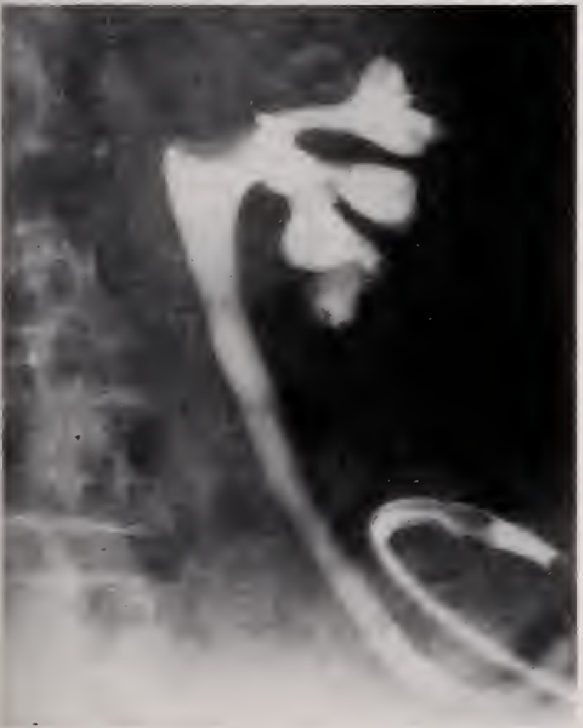

Fig. 3 Retrograde pyelogram demonstrating large filling defect in renal pelvis.

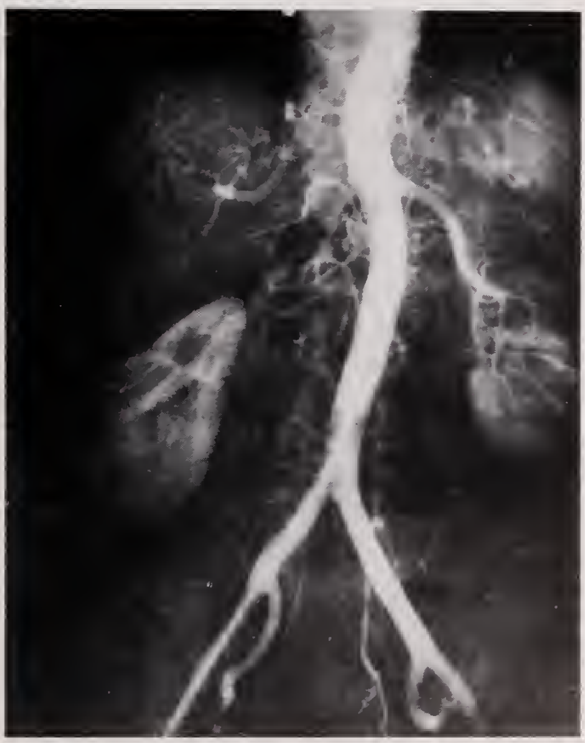

Fig. 5 Renal arteriogram clearly defining the mottled, avascular nature of invasive transitional cell carcinoma in the left upper pole.

TREATMENT

	None	*Local Excision*	*Nephrectomy*	*Nephro-Ureterectomy*	*Radiation*
Epidermoid carcinoma					
Alive (months)					
Dead (months)	1 (1)		2 (4)		
Transitional cell					
Alive (months)		1 (6)	2 (28-90)	3 (4-92)	
Dead (months)			4 (18)	1 (11)	1 (10)

Fig. 6

tient with possible renal pelvic carcinoma in whom the diagnosis has not been clarified by excretory or retrograde urography. With the increased likelihood of renal pelvic carcinoma suggested by the angiographic findings, plans for the most suitable incision can be made in a more appropriate manner.

Although nephroureterectomy is rightfully advocated in the surgical management of invasive renal pelvic carcinoma, simple nephrectomy or even local excision may be indicated in accordance with the clinical staging as has occurred in this series. The decision to perform simple nephrectomy in our patients was based on the findings of local extension at the time of operation, whereas simple tumor excision appeared warranted when the lesions appeared to be superficial and nephrectomy unwarranted for other reasons. Although survival appeared to be improved in the group treated with nephroureterectomy, definite bias in case selection necessarily influenced the results (Fig. 6).

In general, epidermoid and invasive transitional cell carcinoma had an unfortunate outcome. With one exception, all of the patients with invasive transitional cell carcinoma have died, the mean survival being 15 months. Six of the 15 patients or 40% of the series are still living. All but one had noninvasive carcinoma.

In summary, the diagnosis of renal pelvic carcinoma usually can be established or strongly suspected from ordinary urographic studies. In circumstances in which there is diagnostic uncertainty, angiography has the capacity to enhance the precision of preoperative assessment and aid in management of the patient.

Traumatic Arteriovenous Fistulae

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no capillary fill. Digital flow prior to surgery could not be detected with the ultrasonic flowmeter or mercury strain gauge plethysmography.

Discussion

We have presented a case of arteriovenous fistula of the foot which was brought about by a penetrating wound. The evolution of this arteriovenous fistula led to decreased digital flow. Distended superficial veins demonstrated venous valvular incompetence when examined with the ultrasonic flowmeter. Areas of abnormal arteriovenous activity were noted well outside the area of the initial penetrating injury.

The Doppler ultrasonic flowmeter has been used as a diagnostic adjunct at the University of Missouri Medical Center since 1968. It plays a major role in the intraoperative evaluation of the arterial reconstruction and other types of vascular procedures.[3–7] The use of the flowmeter, intraoperatively with gas sterilized probes, allows the surgeon to make a better denouement of the hymodynamic alterations caused by abnormalities in the vasculature.

Summary

The Doppler ultrasonic flowmeter is used to delineate the extent of arteriovenous abnormalities in the foot of a young lady who had suffered a penetrating injury of the sole of the foot as a child. Intraoperative use of the flowmeter with a sterile probe enables the surgeon to locate the abnormal vascular connections and methodically ligate and obliterate them. It allows the discernment of the other areas of arteriovenous abnormalities that escape detection by angiography. We are convinced that the Doppler ultrasonic flowmeter is a valuable diagnostic and intraoperative adjunct to the surgeon's armamentarium.

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Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (> 5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules.

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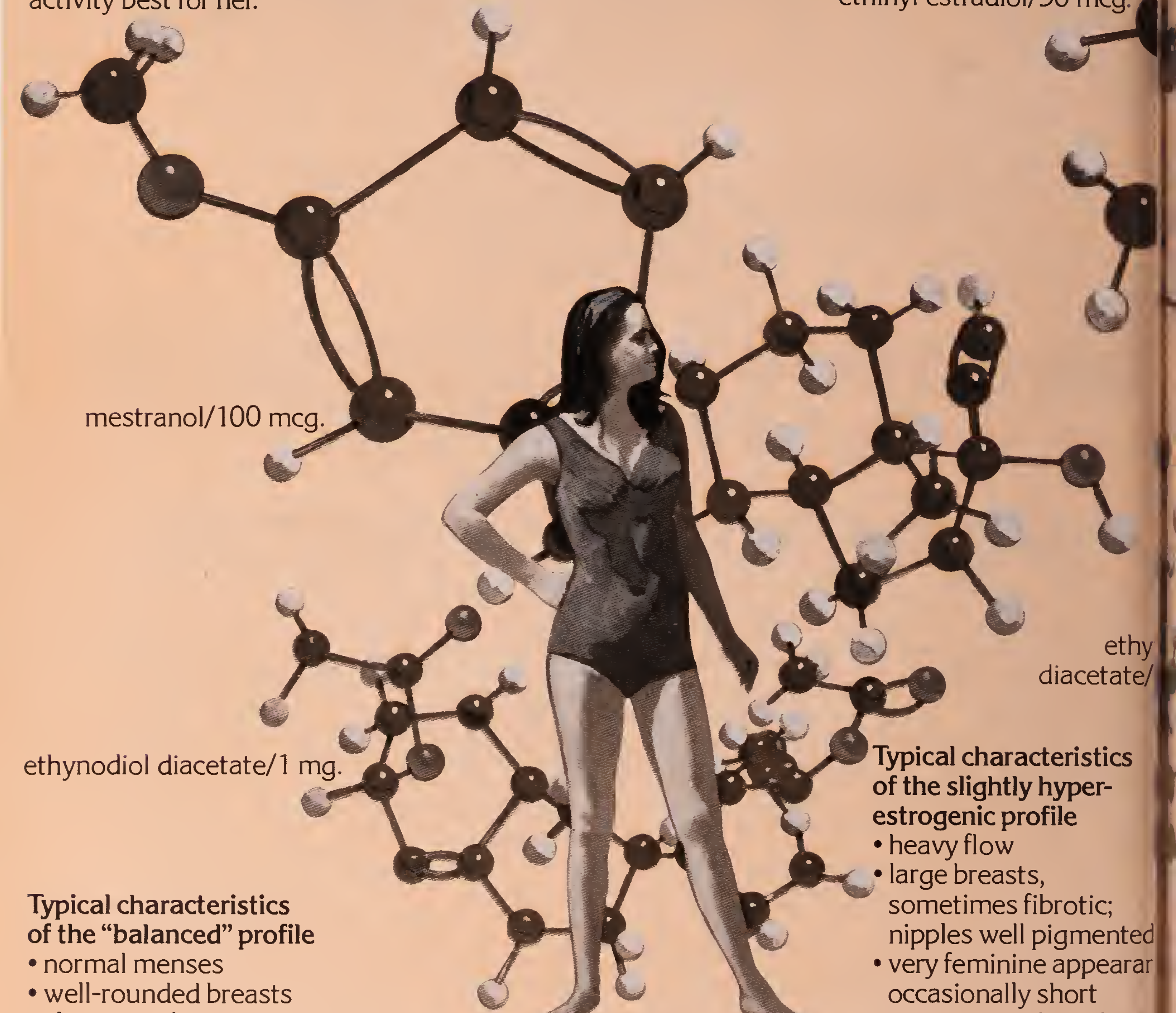
What's in it for her?

All steroid molecules are not the same... in their activity. In prescribing birth-control pills, estrogen/progestogen activity is more important than milligrams. The woman's hormone profile often indicates the activity best for her.


ethinyl estradiol/50 mcg.
mestranol/100 mcg.
ethynodiol diacetate/1 mg.
ethy
diacetate/

Typical characteristics of the "balanced" profile
- normal menses
- well-rounded breasts
- clear complexion
- normal figure with normal secondary sex characteristics
- normal cytohormonal pattern

This "center spectrum" pill has had excellent user acceptance for over seven years.

Ovulen®

Available in 20-, 21- and 28-pill schedules
Each white tablet contains: ethynodiol diacetate 1 mg./mestranol 0.1 mg.
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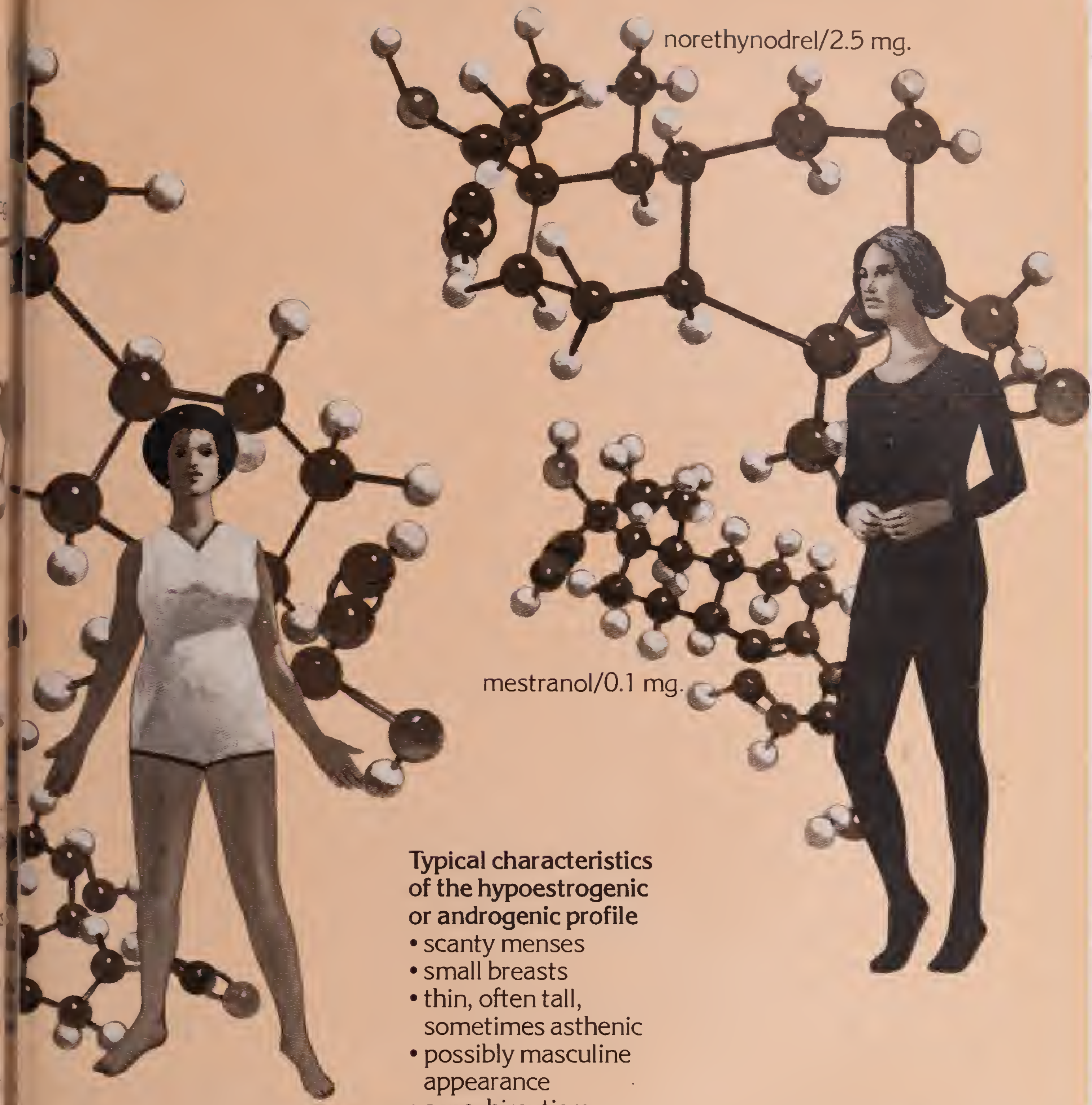
for the majority of women... when centrally balanced activity is preferred

Typical characteristics of the slightly hyper-estrogenic profile
- heavy flow
- large breasts, sometimes fibrotic; nipples well pigmented
- very feminine appearar occasionally short
- premenstrual syndrom fluid retention
- tendency to uterine fibroids
- high pyknotic index

This formulation, which less estrogenic activity a a moderate progestogen dominance, may be a go beginning.

For brief summary of prescribing information please see next page.


norethynodrel/2.5 mg.
mestranol/0.1 mg.

Demulen®

vailable in 21- and 28-pill schedules
ach white tablet contains: ethynodiol
iacetate 1 mg./ethinyl estradiol 50 mcg
ach pink tablet in Demulen-28® is a
lacebo containing no active ingredients.

vell suited to most women vhen low estrogenic activity ınd moderate progestogen lominance are preferred

Typical characteristics of the hypoestrogenic or androgenic profile

- scanty menses
- small breasts
- thin, often tall, sometimes asthenic
- possibly masculine appearance
- acne, hirsutism
- low sexual motivation
- thin vaginal lining, tendency to vaginitis and dyspareunia

This pill has a relatively weak and unique* progestogen with inherent estrogenicity. Clinically, just as in animal studies, it appears not to possess antiestrogenic and androgenic activity.

Enovid-E

Available in 20- and 21-pill schedules
Each tablet contains: norethynodrel
2.5 mg./mestranol 0.1 mg.

a clear choice for women when estrogen dominance and no androgenic activity are preferred

*Of all the progestogens, norethynodrel most resembles the molecular structure c the estrogens. It has the weakest progestational activity of any progestogen in a combination pill.

Ovulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen-28® is a placebo, containing no active ingredients.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations pre-existing uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. 2:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. 2:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. 90:365-380 (Nov.) 1969.

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with estrogen-dominant/nonandrogenic activity

norethynodrel 2.5 mg./mestranol 0.1 mg.

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Indication—Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

Enovid-E®

brand of norethynodrel with mestranol

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RONALD A. BROWNING, DAVID G. HOF,
ROGER B. HIGGS *and* RICHARD H. MARTIN, M.D., *Columbia*

Angina Pectoris

Recent Advances in Understanding and Implications for Management

Angina pectoris used to be a rather simple, even dull, problem which commonly confronted and not infrequently frustrated the practicing physician. His therapy was at best empirical and limited to palliative drug treatment. Now, much of this has changed. Intensive study has led to important new insights into the natural history of ischemic heart disease and its pathophysiology, the understanding of which has become critical for intelligent patient management. Simultaneously, the long-awaited appearance of a rational and promising surgical approach to this problem offers the physician an important new therapeutic option. This paper reviews recent developments in this now very exciting field, focusing upon implications of new information for the care of the patient with angina pectoris.

Natural History of Angina Pectoris

Angina pectoris is a disease syndrome defined by distinctive chest discomfort which is generally substernal, usually related to exertion and generally relieved by rest or nitroglycerin or both. The syndrome is variable in presentation, severity and prognosis. Opinions about prognosis range from "the probability of a long and useful life"[1] to "the lot of the victim of angina pectoris is not a happy one."[2] A more scientific approach to prognosis is now emerging, and some preliminary data are already available.

There are four clinical subsets of angina pectoris: (1) stable angina, (2) unstable ("preinfarction") angina, (3) variant (Prinzmetal) angina and (4) a somewhat ill-defined syndrome of angina with normal coronary arteries. These subsets have distinctly different prognoses.

Most studies of the prognosis of *stable* angina pectoris have been retrospective and have lacked details of patient selection, angiographic confirmation of diagnosis and control of the treatment administered during observation. These studies have generally found stable angina to carry an increased risk of death of 5% to 7% per year.[3] A recent report from the Framingham study[2] provides the only available prospective investigation of natural history. The study population of 5,209 residents of the community of Framingham, Mass., who range in age from 30 to 59, is presumably typical of the population at large, and the data serve as the best guideline to what a physician can expect in unselected patients with angina. Fig. 1 summarizes some of these data, as well as related data derived from other sources reviewed later in this paper. Symptomatic coronary heart disease in one of the forms shown in Fig. 1 can be expected to develop in 10% of a population followed for 14 years. Specific rates of complications and death vary with age and sex (men fare less well than

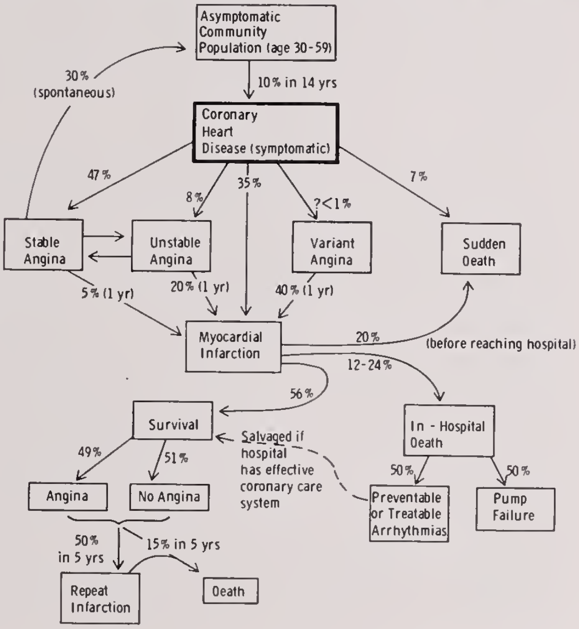

Asymptomatic Community Population (age 30-59)
30% (spontaneous)
10% in 14 yrs
Coronary Heart Disease (symptomatic)
47%
8%
35%
?<1%
7%
Stable Angina
Unstable Angina
Variant Angina
Sudden Death
5% (1 yr)
20% (1 yr)
40% (1 yr)
Myocardial Infarction
20%
(before reaching hospital)
12-24%
56%
Survival
Salvaged if hospital has effective coronary care system
In - Hospital Death
49%
51%
50%
50%
Angina
No Angina
Preventable or Treatable Arrhythmias
Pump Failure
50% in 5 yrs
15% in 5 yrs
Repeat Infarction
Death

Fig. 1 The natural history of coronary heart disease. Data upon which this figure is based were taken from References # 2, # 4, # 5, # 6 and # 8.

The results of an extensive review of recent literature on angina pectoris have been condensed and combined with illustrative case reports to help the practicing physician manage his patients with angina. The authors advocate an aggressive approach to such patients which is based upon new data on the natural history of angina, recently defined physiologic principles and a critical examination of advances in medical and surgical therapy. Mr. Browning and Mr. Hof are Senior Medical Students, Mr. Higgs is a Junior Medical Student and Dr. Martin is Associate Professor of Medicine and Physiology and Director, Division of Cardiology, University of Missouri School of Medicine. This work was supported in part by PHS Training Grant # TO1-HL 05787 from the National Heart and Lung Institute.

women). On the average, stable angina carries an excess mortality of 4% per year compared to individuals without angina. Among men with angina pectoris, the incidence of myocardial infarction is approximately 25% in five years, which is about twice that of women with angina and men who do not have angina. Only 23% of patients who develop myocardial infarction will have a prior warning signal of angina.[2]

Unstable angina has become the accepted term for a syndrome previously given a variety of names including acute coronary insufficiency, intermediate syndrome and preinfarction angina. Recent studies[4, 5] have cast considerable doubt upon the validity of the adjective "preinfarction," which should no longer be used. Unstable angina is defined as angina pectoris (1) of recent onset, (2) increasing frequency or severity or both or (3) occurring at rest, in a patient who shows no ECG or serum enzyme evidence of infarction. This syndrome appears to identify a group of patients whose prognosis falls between that of stable angina and acute myocardial infarction. The risk of myocardial infarction in this group of patients is approximately 20% in one year, with a one-year mortality in the range of 12% to 16%.[4, 6] An even higher risk is found in patients with sudden deterioration of chronic stable angina (mortality 19% in one year)[4] and those who continue to have frequent angina at rest despite hospitalization and intensive medical therapy (mortality, 43% in one year).[6]

Variant angina was first described by Prinzmetal.[7] Patients in this very small subset present with anginal pain at rest or during normal activity which is neither aggravated by exertion nor relieved by rest, usually lasting longer than typical angina, often occurring at about the same time each day and frequently associated with ventricular arrhythmias. The diagnostic feature of this syndrome is the presence during episodes of pain of an electrocardiographic ST vector oriented toward the ischemic area of myocardium ("ST segment elevation"[7]). Limited evidence suggests a high incidence of proximal, high-grade obstruction of a major coronary artery in these patients.[8] Patients with variant angina seem to be at extremely high risk with as many as 60% suffering myocardial infarction or death within 19 months.[8]

Another, somewhat controversial[9] subset of angina pectoris is comprised of patients with typical angina pectoris who, on coronary arteriography, have *normal* coronary arteries.[10] These patients, the majority of whom are women, may have typical ischemic electrocardiographic and metabolic responses to exercise as well. The size of this group is uncertain; some authors feel it represents as much as 10% of all patients with angina, although experience at the University of Missouri-Columbia and elsewhere[9] would suggest a figure considerably smaller than this. The course of these patients is generally benign, although there have been reports of death due to subendocardial infarction.[11]

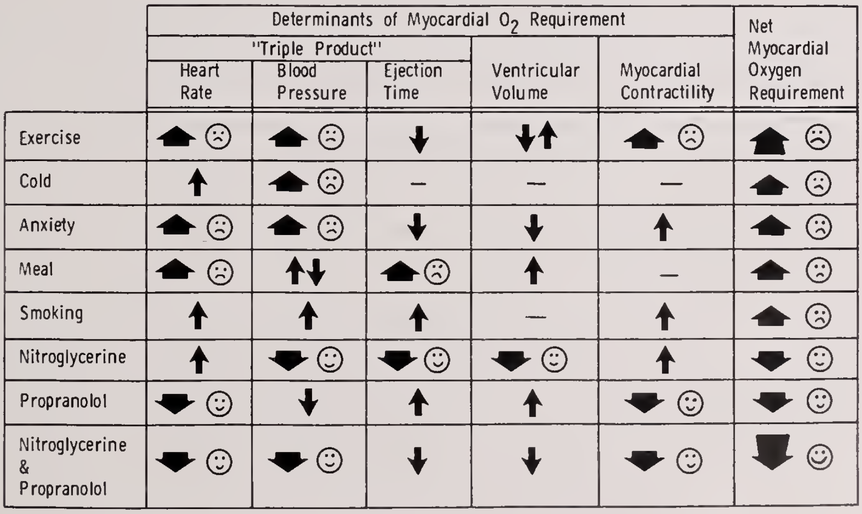
Selective coronary arteriography provides an anatomic classification of coronary disease potentially more objective than classification by syndrome. A sufficient number of patients have been followed subsequent to coronary arteriography without operative intervention to permit preliminary conclusions regarding the prognosis of various anatomic lesions.[12, 13] The data of Moberg *et al* from the Cleveland Clinic represent the largest experience reported to date.[13] These investigators found that isolated high-grade (greater than 80%) stenosis of the right or left circumflex coronary artery carried a mortality of 12% in seven years (less than 2% per year). The mortality of isolated lesions of the left anterior descending artery was 27% to 36% in seven years (depending upon location of the stenosis distal or proximal to the first septal perforator). Stenosis of two major coronary arteries gave a seven-year mortality of 44%, while 70% of patients with stenoses of all three major vessels were dead in seven years.[13]

PATHOPHYSIOLOGY OF ANGINA PECTORIS

Angina pectoris results from myocardial ischemia. Ischemia will occur whenever the ability of the coronary vasculature to deliver oxygen fails to meet the requirements of the myocardium. Thus, ischemia (and angina) may be relieved either by improving the oxygen delivering capacity of the diseased coronaries or by decreasing the myocardial oxygen demand. The major determinants of myocardial oxygen requirements are shown in Fig. 2. They are systolic left ventricular wall tension (a function of systolic pressure and left ventricular volume), the length of time tension is exerted per cardiac cycle (ejection time), the number of beats per minute and the contractile state of the heart. The "triple product" of systolic blood pressure, heart rate and ejection time provides a rough index of the level of myocardial oxygen demand. When a patient with angina pectoris performs an activity which produces an increase in any or all of the components of the product, he will theoretically experience ischemic pain when the product exceeds his oxygen demand threshold.[14] For a given subject with stable angina, the oxygen demand threshold has been demonstrated to be quite constant. Such things as cold temperature, anxiety, postprandial state and cigarette smoking increase one or more components of the triple product as shown in Fig. 2. Thus, at a given level of physical exercise, the addition of any of these other "stresses" will result in a decreased exercise capacity.[14] These rules do not apply to variant angina which can occur without a change in triple product,[15] perhaps as a result of coronary artery spasm.[16]

MECHANISMS OF ANTI-ANGINAL DRUG ACTION

The actions of anti-anginal drugs also can be analyzed by their effects on the O_2 supply-demand relation. Two general classes of anti-anginal drugs are in common use: nitrites and beta-adrenergic blocking agents. When taken sublingually, nitrites, the prototype of which is nitroglycerine (TNG), commonly give relief of typical angina at an interval which coincides with the appearance of a significant blood concentration and demonstrable hemodynamic effects of the drug. They also can be shown to reduce electrocardiographic evidence of ischemia and improve myocardial metabolism and function during angina.[17] Given prior to exercise, they may significantly increase exercise capacity prior to the onset of pain and prevent electrocardiographic and hemodynamic changes.[14] There is evidence that oral administration of nitrites in any form is relatively ineffective.[14, 18] This appears to be due to very rapid hepatic metabolism which essentially totally clears nitrites from portal venous blood before passage into the systemic circulation.[18] The occasionally apparent effectiveness of oral nitrites probably results from placebo effects, which can be very potent in patients with chronic pain syndromes. Sufficient nitrite effect must be achieved to yield a 10 mm drop in systolic blood pressure if appreciable prophylactic effects are to be demonstrated,[14] and the patient should be warned about postural hypotension. Careful studies have failed to demonstrate any significant difference between the duration of action of sublingually administered isosorbide dinitrate (ISDN) and TNG. Each drug exerts its maxi-



	Determinants of Myocardial O_2 Requirement					Net Myocardial Oxygen Requirement
	"Triple Product"					
	Heart Rate	Blood Pressure	Ejection Time	Ventricular Volume	Myocardial Contractility	
Exercise	⬆ ☹	⬆ ☹	↓	↓↑	⬆ ☹	⬆ ☹
Cold	↑	⬆ ☹	—	—	—	⬆ ☹
Anxiety	⬆ ☹	⬆ ☹	↓	↓	↑	⬆ ☹
Meal	⬆ ☹	↑↓	⬆ ☹	↑	—	⬆ ☹
Smoking	↑	↑	↑	—	↑	⬆ ☹
Nitroglycerine	↑	⬇ ☺	⬇ ☺	⬇ ☺	↑	⬇ ☺
Propranolol	⬇ ☺	↓	↑	↑	⬇ ☺	⬇ ☺
Nitroglycerine & Propranolol	⬇ ☺	⬇ ☺	↓	↓	⬇ ☺	⬇ ☺

Fig. 2 Effects of certain stresses and drugs on myocardial oxygen requirements. Frowning faces indicate major effects which aggravate angina; smiles indicate major beneficial effects.

mum effect at ten minutes; the effect is markedly diminished at one hour and absent within two hours of administration.[19]

As shown in Fig. 2, nitrites have several effects upon myocardial O_2 needs. They lower systolic blood pressure and reduce systemic venous return, thus decreasing left ventricular end-diastolic volume and wall stress.[14] Although effective nitrites markedly dilate proximal (conduit) coronary arteries as shown by coronary arteriography, controversy continues to exist concerning their possible role in improving oxygen supply to ischemic myocardium. Ischemia is the most potent dilator of coronary resistance vessels (arterioles) which control flow to local areas of myocardium; other vasodilators would not be expected to have any additional dilating action on such vessels when ischemia is present. However, it is possible that nitrites may dilate collateral conduit channels distal to a stenotic segment and, thus, improve perfusion of local ischemic areas.[20, 21]

Since beta-adrenergic stimulation of the myocardium markedly increases myocardial O_2 demand by increasing heart rate and contractility, there is a sound rationale for the use of beta-blockade in the treatment of angina pectoris. Presently, propranolol is the only beta-adrenergic blocking drug available in the United States. It has not been officially approved for angina pectoris, but is commonly used for this indication. Given orally to patients with coronary disease, this drug may significantly increase angina limited exercise capacity and can delay the onset of ischemic ST-T abnormalities.[22] It also may abolish the ECG and hemodynamic changes noted during ischemic attacks in patients with variant angina.[15] Propranolol appears to exert its anti-anginal effect entirely by reducing myocardial oxygen demands. As shown in Fig. 2, it reduces myocardial contractility, reduces systolic blood pressure, and slows the heart rate. Propranolol and nitrites both have effects which alone would tend to increase myocardial O_2 requirements (increased left ventricular size and tachycardia, respectively). However, as shown in Fig. 2, when used in conjunction with each other, the potentially adverse effects of each drug are cancelled by the beneficial effects of the other. The anti-anginal effects of propranolol appear to be dose-dependent[22] and doses considerably greater than those used for control of cardiac arrhythmias may be required. In general, enough drug must be given to decrease the resting pulse rate to levels between 55 and 60. Doses as high as 1,280 mg per 24 hours have been used.[22] Patients receiving propranolol should be observed closely for manifestations of congestive heart failure, which, at times, may be prevented or controlled by digitalis and diuretic therapy. Beta-adrenergic blockade is contraindicated in patients with bronchial asthma. Relative contraindications include serious chronic obstructive lung disease, and diabetes mellitus requiring either insulin or oral hypoglycemic agents because beta blockade masks the symptoms of hypoglycemia.

Surgery for Angina Pectoris

The introduction of direct coronary artery bypass grafting promises to represent a major advance in the management of patients with angina pectoris. Unlike numerous operations previously carried out for angina pectoris, the rationale for the bypass procedure is quite sound. This operation involves placement of reversed autogenous saphenous veins or internal mammary arteries or both between the ascending aorta and one or more coronary arteries distal to the point of a high-grade stenosis demonstrated by coronary arteriography. In experienced hands, aorto-coronary saphenous vein bypass carries a mortality of 2% to 10%.[23] It is reasonable to expect that even lower mortality will be experienced by groups operating on large numbers of carefully selected patients.

The following factors increase operative mortality: operating under emergency circumstances, severely limited exercise capacity and markedly reduced left ventricular ejection fraction (stroke volume/end-diastolic volume) assessed by left ventriculography.[23] The number of vessels grafted has less influence on mortality. Eighty to 90% of surviving patients will become either totally asymptomatic or experience a marked improvement in angina following this operation.[23] Most of this group also will demonstrate objective evidence of increased functional capacity or decreased ischemia at a given level of exercise, and many will return to full-time employment.

Several serious questions about this procedure remain, however. While some enthusiasts have begun to advocate this operation to prevent myocardial infarction, several groups have reported a disturbingly high incidence of myocardial infarction in the immediate postoperative period, ranging from 11%[24] to 20%.[25] One provocative recent report from Johns Hopkins Hospital has suggested an incidence of postoperative myocardial damage as high as 58%.[26] Despite the apparent frequency of this complication, patients who show evidence of postoperative myocardial infarction appear to experience a low mortality and may have a rate of postoperative improvement in angina which is comparable to that of patients who do not suffer myocardial damage.[26] Immediate patency of bypass grafts exceeds 90% in most series, and one- to two-year patency rates range from 70% to 85% for single grafts. In patients undergoing multiple grafts, the chances that all grafts will remain patent is somewhat lower.[24] Patients studied at 25 to 49 months after bypass grafting at the Cleveland Clinic had a late graft patency rate of 84%, suggesting that occlusion of grafts between years one and four may be an unusual event.[27] The long-term fate of bypass grafts and the native coronary vessels into which they are inserted remains to be determined, however.

Aorto-coronary bypass is currently indicated for patients with stable, unstable or variant angina who cannot be adequately managed with medical therapy and who have favorable coronary artery lesions and no contraindications to the procedure.[23] Although one recent report[27] provides grounds for optimism about the potential of bypass grafting to reduce the mortality of coronary disease, no carefully controlled study of the effect of this operation on prognosis has been reported, and prospective studies are only now being undertaken. Thus, there is as yet no sound experimental evidence upon which to base a recommendation to an individual patient with angina pectoris that an operation may reduce his risk of myocardial infarction or alter his risk of dying of coronary heart disease.

Management of the Patient with Angina

After establishing that a patient has angina and excluding treatable causes such as valvular heart disease and hyperthyroidism, the physician must set appropriate therapeutic goals. Prolongation of the patient's life may not yet be an attainable goal. However, palliation, which focuses only upon prevention or relief of pain, is not a sufficient goal in managing the patient with angina. The physician must deal as well with the anxiety and concern about disability or death or both which commonly accompanies the knowledge that a patient has coronary heart disease. Some patients with so-called "refractory" angina are incapacitated more by fear and uncertainty than by their episodes of exertional angina which promptly subside with rest and, in large part, may be prevented by prophylactic medication and appropriate modification of behavior. Writing a prescription for a tranquilizer requires less time but is a sorry substitute for a thorough discussion of the patient's concerns about his disease. The physician must assume a strongly positive and optimistic approach to the patient's management. Indeed, it can be argued that some of the success the surgeon has enjoyed in relieving pain and returning patients to work may be directly related to his aggressively positive approach, which may contrast with that of the physician who so often has been frustrated in his attempts to keep the angina patient functioning effectively in society.

The next steps involve favorably altering the balance between myocardial O_2 supply and demand. Attention should be given to factors such as hypertension, diabetes, abnormalities of serum lipoproteins, obesity and cigarette smoking, which may be accelerating the development of atherosclerosis or unnecessarily augmenting myocardial O_2 needs. Evaluation of the patient's life-style may find certain behavior patterns which can be modified within the framework of maintaining an active, productive and satisfying life. However, it is inexcusable to require the patient to retire from most types of work without having first exhausted other approaches to his management.

The patient should be instructed in the use of (fresh) nitroglycerine taken sublingually as liberally as necessary to provide adequate control of angina. He should be urged to use TNG at the first suspicion that he may be about to experience angina or immediately prior to activities during which he has previously encountered angina. His TNG intake should be checked frequently to detect the common phenomenon of inadequate nitrite utilization resulting from the advice of friends or relatives who have been led to fear the excessive use of the drug. If this approach does not control symptoms adequately and permit the patient to maintain an active life-style, the addition of "prophylactic" sublingual nitrites (TNG or ISDN q 1-2h) may offer some further benefit. The patient initially should experience some nitrate headache if blood levels sufficient to achieve an appreciable reduction in myocardial oxygen demand are to be achieved. Tolerance to this nitrate headache will develop, usually without tolerance to the anti-anginal effects of the drug.

If nitrites administered in this way do not provide sufficient control of angina, beta-adrenergic blockade should be induced. Assuming that no contraindications exist, a propranolol regimen is begun in a dosage of 10 mg to 40 mg qid. Appreciable sinus bradycardia may appear at this low dosage level, which rarely causes other side effects. The dose should be increased every few days until effective prevention or control of angina is achieved or unacceptable side effects limit further increase in dosage. Once adequate control of symptoms is achieved, a program of regular walking exercise often is helpful emotionally and physically. After control has been maintained for several months, it is appropriate to gradually withdraw drug therapy since an appreciable percentage of patients with stable angina may experience spontaneous remissions.[2] This may be particularly true of patients with single vessel disease, although the data upon which this statement is based are meager.[12, 28]

If adequate control of stable angina cannot be achieved with this combination of aggressive drug therapy and optimistic supportive psychotherapy, consideration should be given to surgical intervention for those patients who have no serious contraindications to open heart surgery, such as severe chronic lung disease. Coronary arteriography is required to assess operability. In addition, anatomic definition of the disease may impact significantly upon the medical management of individual patients with angina. For example, finding normal coronary arteries, with the attendant excellent prognosis for this group of patients, may serve to break a vicious cycle of anxiety and chest pain. Similarly, the demonstration of a single lesion of a right coronary artery (another favorable prognostic situation[13]) may provide the physician with needed reinforcement of his original decision to pursue medical management, making his approach to the patient more optimistic and potentially leading to enhanced therapeutic effectiveness. Conversely, the finding of high-grade stenoses of two or more proximal coronary arteries with good distal vessels in a patient about whom there otherwise may be some doubt as to the need for surgery may lend support to a surgical approach because of the apparently poor prognosis for spontaneous remission of pain[28] and the relatively high mortality of such patients without operation.[13]

Other potentially "high-risk" groups of patients warranting early arteriographic study may be identified by their clinical syndromes. For example, the patient with variant angina with demonstrable ST segment elevation during pain may be considered a particularly important candidate for arteriographic definition of his disease because of the likelihood of finding a bypassable proximal stenosis and the apparently grim prognosis for such patients.[5] The management of the patient with unstable angina is presently the subject of controversy. Although operation on all patients with unstable angina who prove to have favorable anatomic lesions cannot be justified on the basis of present prognostic data,[4] angiography may again prove useful in this group. Eighteen percent of such patients may prove to have normal coronary arteries.[29]

Although oral anticoagulants have been used for unstable (and occasionally stable) angina for many years, evidence of their efficacy in these syndromes remains unconvincing. The theoretical rationale for their use to prevent infarction is questionable since coumarin derivatives may not effectively prevent small arterial thrombi and the role of thrombosis in the genesis of myocardial infarction is controversial.[30] Since a risk of hemorrhage accompanies their use, anticoagulants currently are not generally recommended in the management of angina pectoris.

Case Reports

The following case summaries illustrate some of the points made above.

Case # 1. A 46-year-old housewife developed exertional substernal pain at the age of 32. Her mother had died of a myocardial infarction at age 48. Upon evaluation at the University of Missouri-Columbia in 1968, an exercise electrocardiogram showed equivocal ST segment depression and serum lipids were normal. Coronary arteriography was carried out for diagnostic purposes. A 75% narrowing of the left anterior descending coronary artery was demonstrated. Her angina responded to nitrite therapy, but she developed pain from ischemia in the right forearm and hand, which was relieved by a saphenous vein graft at the site of the stenosed brachial arteriotomy. In November, 1972, the frequency of her angina increased to 20 to 25 episodes per day, often while she was at rest, and frequently awakened her from sleep. She was admitted to the hospital and noted no improvement while receiving 10 mg of ISDN orally every four hours. After transfer to the cardiology service, oral nitrites were discontinued, ISDN 5 mg was given sublingually every two hours and propranolol therapy, 40 mg q 6h, was begun. That day her episodes of chest pain ceased and did not recur for the next week. When she resumed her ordinary household activities, she required 5 TNG per day, prompting an increase in propranolol to 120 mg q 6h and ISDN to 10 mg q 2h. She subsequently has experienced only an occasional episode of exertional angina which is promptly relieved by TNG, but symptoms of depression and fatigue have limited further propranolol therapy.

Comment: Coronary heart disease occasionally does occur in premenopausal women with normal serum lipoproteins. When this patient developed unstable angina, a strong case could have been made for repeat coronary arteriography and consideration of bypass surgery. However, in part because she had previously experienced one of the fortunately unusual complications of coronary arteriography, she elected to undertake an intensive medical regimen. One may speculate about whether the drugs or the aggressively positive approach adopted by a new physician was responsible for the dramatic cessation of pain. It is of interest that the patient herself commented upon the possible role of her fear of impending sudden death in the exacerbation of her angina as she approached the age at which her mother had died of a myocardial infarct.

Case # 2. A 33-year-old physician had experienced a well-documented acute anteroseptal myocardial infarction in 1969. He had returned to work and was free of symptoms until November, 1971, when he began to note episodes of substernal and epigastric distress brought on by exertion or emotional stress and generally relieved by TNG. ISDN administered sublingually and propranolol therapy were begun without appreciable effect. The combination of recurrent pain and anxiety about the significance of the pain threatened to interfere with his career, and coronary arteriography was undertaken to better define his problem. The study demonstrated total occlusion of a small diagonal branch of the left coronary artery. All other vessels, including the three major coronary arteries, appeared perfectly normal. Instillation of acid into the esophagus reproduced the patient's substernal discomfort. The highly favorable nature of the coronary arteriographic findings was discussed with him, the nitrites and propranolol were discontinued and he was treated with antacids. He experienced a dramatic remission of pain and apprehension, returned to work and remains asymptomatic.

Comment: This case illustrates the potentially therapeutic value of coronary arteriography in a patient with definite coronary heart disease. Although arteriography was carried out primarily to look for an operable lesion, the findings led to a reevaluation of the cause of his pain and to a dramatic "cure" of his problem.

Case # 3. A 41-year-old mother of 13 children was admitted to the University of Missouri-Columbia Medical Center in June, 1972 for evaluation of incapacitating exertional substernal pain. She had first experienced mild exertional angina in 1966. Physical examination was unremarkable and the electrocardiogram revealed only nonspecific ST abnormalities. An exercise electrocardiogram was equivocal, and coronary arteriography was performed. High-grade stenosis at the origin of the left anterior descending and complete occlusion of the posterior descending branch of the right coronary artery were found, but the left ventricular ejection fraction was normal. Her symptoms were controlled in the hospital with sublingual nitroglycerine, and she was discharged on a regimen of propranolol, 20 mg q 6h. Exertional angina recurred, and she began to be awakened by substernal pain. Under the care of another physician, she was given increasing amounts of meperidine and hydroxyzine and developed subcutaneous abscesses at several injection sites. She was readmitted to the Medical Center in November, 1972 and failed to respond to propranolol, 480 mg per day, and ISDN, q 2h, administered sublingually. The patient volunteered that she had become dependent upon meperidine, and narcotics were successfully withdrawn during a prolonged hospitalization required to control chest pain and permit healing of the subcutaneous abscesses prior to performing coronary artery surgery. A saphenous vein graft was anastomosed to the left anterior descending artery on Jan. 9, 1973. Her postoperative course was uneventful and she was discharged from the hospital seven days later. She is presently asymptomatic.

Comment: Some patients with angina do not respond to aggressive medical treatment. This patient illustrates the fact that addiction can complicate the management of any chronic pain syndrome. Because she had severe disease of two major coronary arteries, only one of which was bypassable, her prognosis for survival was (? is) probably quite poor. Successful coronary artery surgery appears to have improved the quality of her life. Whether it has influenced her long-term prognosis may be of secondary importance in view of the incapacitating nature of the symptoms for which the operation was performed.

Case # 4. A 52-year-old man was in good health until April, 1972, when he experienced severe chest pain while at work. He was hospitalized but no evidence of myocardial infarction was found. Type IV hyperlipoproteinemia was discovered and appropriate modification of diet was begun. Despite treatment with nitrites and propranolol, he noted incapacitating exertional angina and was admitted to the Columbia VA Hospital where coronary arteriography demonstrated high-grade stenosis of the proximal left anterior descending coronary artery. A saphenous vein bypass graft was performed on June 15, 1972. Hypotension occurred on the first postoperative day and serial electrocardiograms showed evidence of an evolving anterior myocardial infarction. Coronary arteriography was repeated on July 5, 1972. The anterior descending artery was totally occluded, and no flow could be demonstrated through the graft. A new dyskinetic segment of the anterior left ventricular wall was noted. He remained free of chest pain subsequent to discharge from the hospital, but developed mild dyspnea requiring digitalization in September, 1972. He has returned to work and remains free of chest pain and symptoms of congestive heart failure.

Comment: This patient, who is aware of the fact that postoperative graft occlusion and myocardial infarction occurred, remains asymptomatic and has personally referred several other patients with chest pain for consideration of coronary artery surgery. His course suggests that infarction of the ischemic myocardium relieved his angina. Postoperative infarction is often well-tolerated and may not significantly impair the symptomatic benefit of operation.[25, 26] The frequency of postoperative myocardial damage remains a source of concern and warrants further investigation.

Summary

Tremendous advances have been made in the understanding of angina pectoris; they are advances which have important implications for management of this disease. A scientific data base for assessing the prognosis of the individual patient with one of the anginal syndromes is beginning to emerge. Coronary arteriography may further help to define prognosis as well as evaluate operability. Aggressive, rational use of effective anti-anginal drugs, coupled with an appropriately optimistic approach by the physician, will help many patients to function effectively in society. Aorto-coronary bypass surgery gives excellent symptomatic results in selected patients who fail to respond to medical therapy. Although there is as yet no solid evidence that either medical or surgical treatment will alter the natural history of coronary heart disease, effective application of the information reviewed in this paper in many cases can make the "lot of the victim of angina pectoris"[2] a favorable one.

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JOSEPH T. PARISI, Ph.D., ***Columbia***

Staphylococcus Epidermidis, An Emerging Pathogen

Although the role of *Staphylococcus epidermidis* as an etiologic agent in specific infections is difficult to assess, recent studies have shown a greater number of antibiotic-resistant cultures of this organism than *Staphylococcus aureus* in the hospital environment. As a result, *S. epidermidis* should be considered as an emerging pathogen. It is essential that contamination by *S. epidermidis* be strictly avoided and its isolation in the clinical laboratory should not be regarded lightly. Dr. Parisi is Associate Professor, Department of Microbiology, University of Missouri School of Medicine.

THE IMPORTANCE of staphylococci in disease has increased in spite of the common use of antibiotics. Although these organisms are isolated readily from the skin and mucous membranes, their potential disease-producing capabilities are based upon their ability to produce the enzyme coagulase. Although this enzyme causes citrated plasma to coagulate *in vitro*, there is no evidence that coagulase is directly involved in pathogenicity. It is commonly held that only coagulase-positive staphylococci, *Staphylococcus aureus,* should be regarded as potentially pathogenic because of their frequent isolation from disease states. On the other hand, by virtue of their ubiquitous presence in the environment and their inability to produce coagulase, coagulase-negative staphylococci, *Staphylococcus epidermidis,* have long been regarded as harmless saprophytes. Since *S. epidermidis* is found so readily in the environment, when it is isolated from a patient, it is usually regarded as a contaminant and not as an etiologic agent. However, the development of new diagnostic procedures, the complexity of surgical practices and the use of prosthetic devices have increased markedly in the past two decades, with a resulting increased incidence of staphylococcal disease due to *S. epidermidis.* Also, procedures supportive to the newborn, the elderly and other poor-risk patients, whose resistance is already lowered by extensive trauma or treatment with immunosuppressive drugs, may serve as sources of infection by *S. epidermidis.* Its association with severe infections has been observed, especially in endocarditis on prosthetic valves, in shunts implanted to alleviate hydrocephalus and in less severe infections such as urinary tract infections and wound infections. Because the parameters for its pathogenicity have not been defined, however, its role as an etiologic agent in most infections is difficult to assess.[1–4]

In our laboratory studies of the drug resistance of staphylococci isolated at the University of Missouri Medical Center showed that antibiotic-resistant cultures of *S. epidermidis* were more numerous than antibiotic-resistant cultures of *S. aureus.*[5] With 63 cultures of *S. aureus* and 63 cultures of *S. epidermidis* obtained at random from our diagnostic laboratory, the incidence of resistance to nine of 11 commonly used antibiotics was greater for *S. epidermidis* than for *S. aureus.* Furthermore, for seven of these nine antibiotics, the differences in the incidence of resistance of *S. epidermidis* was 12% or greater, as compared to those of *S. aureus.* In studies with these cultures of the minimal inhibitory concentration of clindamycin, we observed that 61 of 63 cultures of *S. aureus* were susceptible whereas only 46 of 63 cultures of *S. epidermidis* were susceptible to this relatively new antibiotic. Other studies also show the comparative antibiotic resistance of *S. epidermidis.* The isolation from clinical sources of a group of mannitol-fermenting strains of *S. epidermidis* resistant to most of the currently used antibiotics, including oxacillin, lincomycin and novobiocin, has been reported recently.[6] The only antibiotic to which all strains were sensitive was vancomycin. In another study of 200 nasal cultures of staphylococci from the general population, 83% yielded penicillinase-producing *S. epidermidis* while only 40% yielded penicillinase-producing *S. aureus.*[7] Although methicillin-resistant strains of *S. aureus* were observed in Great Britain as early as 1961 and now pose a threat in England and other European countries, very few have been reported in the United States even today.[8] On the other hand, it was observed as early as 1963 that 10% of 175 strains of S. *epidermidis* were methicillin-resistant, and this incidence of methicillin-resistance in S. *epidermidis* is observed today.[9] In an epidemiologic study in a hospital for mentally retarded children, it was found that S. *epidermidis* spread more rapidly and to a greater extent than S. *aureus* and developed a higher level of resistance to chloramphenicol than S. *aureus*. Also, chloramphenicol-resistant strains of S. *epidermidis* were found more often in both untreated and treated patients.[10] A greater frequency of antibiotic resistance among strains of S. *epidermidis* isolated from patients with infections than among isolates regarded as contaminants or from healthy carriers has been observed, also.[11]

While the antibiotic resistance of S. *epidermidis* is well-documented and readily determined, the parameters for the pathogenicity of this organism have not been defined. As a result, when S. *epidermidis* is isolated from a patient, the assessment of whether it was the primary causative agent, a secondary invader or merely a contaminant is usually uncertain. It is generally accepted that the ability of S. *aureus* to cause disease is not the result of the production of any single product but, more likely, results from the production of a combination of extracellular macromolecules or enzyme-like substances referred to as "virulence factors." The production by S. *epidermidis* of virulence factors similar to those produced by S. *aureus* has been reported by numerous investigators.[12–14] It is generally accepted that cultures of S. *aureus* can produce any combination of three different hemolysins, designated alpha, beta and delta. Alpha hemolysin is considered to be the most significant as a factor which contributes to staphylococcal infection in humans. In one study, approximately 5% of the cultures of S. *epidermidis* produced alpha, beta or delta hemolysin or a combination of these, while in another study, evidence was presented that the typical hemolysin produced by S. *epidermidis* is delta hemolysin.[12, 13] Although the production of coagulase by S. *aureus* is correlated most closely with its virulence, the *in vitro* production of several other extracellular substances has been used to identify potentially pathogenic cultures. It has been reported that 10% to 20% of cultures of S. *epidermidis* produce protease, deoxyribonuclease, staphylokinase and hyaluronidase while 50% to 70% produced alpha, beta or delta hemolysin, egg yolk factor and phosphatase.[14]

The results in our laboratory of the production by S. *epidermidis* of extracellular substances associated with virulence are in agreement with those reported by other investigators. However, the percentages of our cultures producing these substances were not as high.[5] The most common type of acute food poisoning in the United States today is due to the production of enterotoxin by S. *aureus*. Although it was commonly held that only this species of staphylococcus has the capacity to produce enterotoxin, a recent outbreak of gastroenteritis due to enterotoxin production by S. *epidermidis* has been reported.[15] After 46 characters of pathogenic coagulase-negative staphylococci were studied, it was concluded that the genus *Staphylococcus* should not be divided into two species and the inability to produce coagulase should not be used to classify a staphylococcus as S. *epidermidis*.[16] In another study of 504 clinical isolates, it was found that the production of coagulase and deoxyribonuclease was not necessarily indicative of the potential pathogenicity of staphylococci.[17]

CLINICAL SIGNIFICANCE

S. *epidermidis* should be considered an emerging pathogen and its isolation from a patient either alone or in combination with S. *aureus* should not be regarded lightly. To the contrary, its greater resistance to antibiotics in addition to its capacity to produce some virulence factors makes it imperative that cultures of S. *epidermidis* be tested carefully in the laboratory prior to administration of an antibiotic. Although an antibiotic may be effective in inhibiting S. *aureus*, it may be of little value in inhibiting S. *epidermidis*. Furthermore, as patients undergoing surgery are being subjected to more complicated procedures and the use of more prosthetic devices, it is essential that contamination by S. *epidermidis* be strictly avoided.

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(Continued on page 248)

FREDERICK E. FRIED, M.D., *and*
PARVIZ MALEK-AHMADI, M.D., *Columbia*

Psychopharmacology of the Depressive Neurosis

A Guide for the Family Practitioner

With attentive and judicious therapeutic planning in the treatment of depression, a good prognosis can be expected. This paper presents guidelines and principles to assist the physician in interpreting the results of clinical pharmacological studies,, understanding the current classification of depressions and planning a comprehensive treatment plan which stresses a supportive psychotherapeutic relationship between physician and patient. Dr. Fried is Assistant Professor and Dr. Malek-Ahmadi is a Resident in the Department of Psychiatry, University of Missouri Medical Center.

OSLER ONCE SAID that man distinguishes himself from animals by his propensity for taking drugs. The family physician knows that the giving of drugs is a symbolic act and, as such, is an important part of the doctor-patient relationship. The wise doctor recognizes the patient's need to ventilate problems and to receive reassurance.

The psychotherapeutic management of the depressed patient begins with a diagnostic assessment of the degree and severity of the impairment. The depressive neurosis is distinguished from the depressions of psychotic proportions in that the patient does not grossly misinterpret reality. The depressive neurosis also has been referred to as a reactive depression in which the patient is reacting to a currently unfavorable environmental circumstance such as the loss of a loved one or a professional failure.

From a psychodynamic point of view, depression is considered a defense against anxiety relating to conflicts over the presumed loss. Psychoanalytic theories of depression stress such concepts as the loss of self-esteem, excessive dependency needs, fear of rejection and hostility toward the loved object.

Working from a psychopharmacological point of view, some investigators have developed a hypothesis which relates changes in catecholamine metabolism to states of depression or elation. Agents which potentiate the action of CNS catecholamines function as antidepressants, while those which inactivate or deplete catecholamines centrally predispose of depression. It has been suggested, then, that some depressions and, perhaps, all are associated with a deficiency of catecholamines, especially norepinephrine, at the adrenergic synapse in the CNS, while an excess of these amines exists with behavioral states of elation.

Norepinephrine and serotonin, two monoamines which are stored and metabolized in a very similar fashion, show the same distribution in the CNS except in the limbic lobe, where a relatively higher concentration of serotonin but little norepinephrine is to be found. Norepinephrine is stored in reserve and mobile pools at the site of the synaptosome (Fig. 1). Monoamine oxidase, an enzyme, deaminates any free norepinephrine within the cytoplasm.

Free norepinephrine within the synaptic cleft is inactivated by re-uptake into the vesicle and the remainder is metabolized and converted to normetanephrine by catechol-o-methyltransferase (COMT).

Most of the normetanephrine is deaminated by MAO and converted to vanillylmandelic acid (VMA) while a portion of it is reduced to 3-methoxy, 4-hydroxyphenylglycol (MHPG). The sulfate conjugate of MHPG has been identified in cerebrospinal fluid in human subjects. It is of interest that lowered urinary MHPG excretion has been reported in depressed patients as compared to normal subjects. MHPG excretion appears to increase with clinical improvement from depression under some treatment conditions (Fig. 2).[1]

If we adhere to the catecholamine hypothesis that depression is related to low levels of norepinephrine at the receptor site, we would

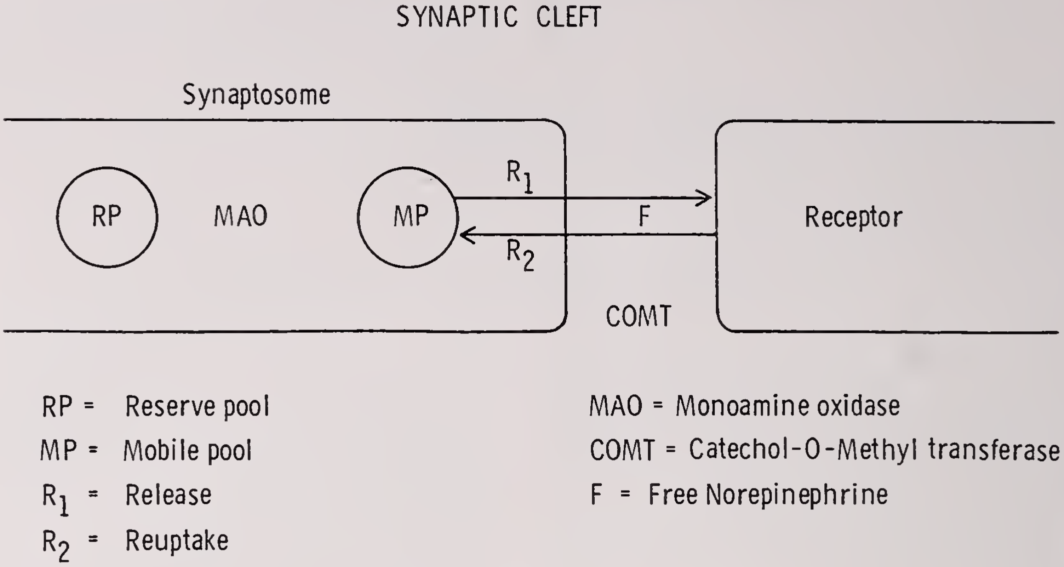
SYNAPTIC CLEFT
Synaptosome
RP
MAO
MP
R_1
R_2
F
COMT
Receptor
RP = Reserve pool
MP = Mobile pool
R_1 = Release
R_2 = Reuptake
MAO = Monoamine oxidase
COMT = Catechol-O-Methyl transferase
F = Free Norepinephrine

Fig. 1

Synthesis and Metabolism of Norepinephrine

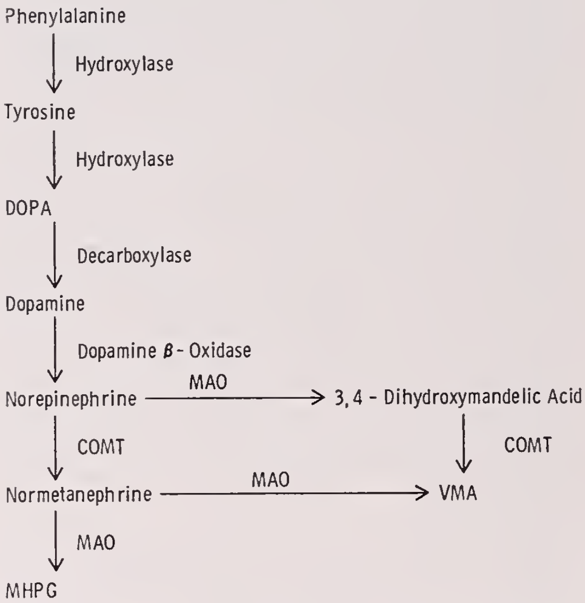
Phenylalanine
Hydroxylase
Tyrosine
Hydroxylase
DOPA
Decarboxylase
Dopamine
Dopamine β - Oxidase
Norepinephrine
MAO
3, 4 - Dihydroxymandelic Acid
COMT
COMT
Normetanephrine
MAO
VMA
MAO
MHPG

Fig. 2

expect that drugs could be effective antidepressants via the following mechanisms:

1) *Stimulation of monoamine synthesis:* Enhancing monoamine synthesis by administration of its precursor theoretically results in increased free monoamine. Since monoamines themselves do not cross the blood-brain barrier, appropriate amino acid precursors must be used. For serotonin, the precursor is L-tryptophan, while for norepinephrine, it is L-dopa which has been used effectively in Parkinson's disease.[2]

2) *Inhibition of MAO and COMT:* As mentioned above, there is a balance between two pools of norepinephrine at the synaptosome. MAO is mainly responsible for maintaining this equilibrium. Therefore, inhibition of this enzyme increases the content of the mobile pool and, consequently, increases the level of monoamine at the synaptic cleft.

Monoamine oxidase inhibitors have limited clinical use mainly because of their hepatotoxicity and the need for dietary restriction and close observation. To the authors' knowledge, no COMT inhibitor that can be used clinically has been discovered.

3) *Stimulation of monoamine release:* Those agents which promote the process of monoamine release lead to an increased level of free monoamine at the synaptic cleft. These are amphetamine and amphetamine-like compounds. Two major problems have restricted the clinical usefulness of these drugs. One is drug dependence after long-term administration and the other is rebound depression after discontinuation.

4) *Inhibition of monoamine re-uptake:* The prevention of re-uptake by any means is highly effective in increasing the synaptic monoamine. Tricyclic antidepressants which have become popular in psychiatry are thought to operate by inhibition of the process of re-uptake. However, this type of action is not limited to these agents. In fact, amphetamines and cocaine act in the same way.

TABLE 1

CLASSIFICATION OF THE DEPRESSIONS

- **I. Depressive neuroses**
- **II. Psychotic depressive reactions**
- **III. Schizo-affective disorders**
- **IV. Major affective disorders**
  - **A. Manic-depressive illnesses**
  - **B. Involutional melancholias**

If a clinician is to interpret the results of clinical pharmacological studies or plan an appropriate course of treatment, it would be helpful if he were familiar with the current classification of the depressions (Table 1). We would agree with Schildkraut[3] that "the classifications of the depressions devised thus far are, at best, preliminary and limited solutions to a major problem in psychiatry."

Systematic investigations into the symptomatology of the depressive disorders have highlighted what Beck[4] refers to as the core signs and symptoms of depression (Table 2). The reader will note that the core signs and symptoms of depression are conceptualized as (1) physical, (2) cognitive, (3) emotional and (4) motivational. No attempt is made to distinguish between neurotic and psychotic depressions on phenomenological or psychodynamic grounds.

TABLE 2

CORE SIGNS AND SYMPTOMS OF DEPRESSION

- **I. Physical and Vegetative**
  - **1. Anorexia**
  - **2. Sleep disturbance**
  - **3. Autonomic symptoms**
  - **4. Constipation**
  - **5. Shift of sexual desires (decrease or increase)**
  - **6. Fatigability**
- **II. Cognitive**
  - **1. Poor concentration**
  - **2. Suicidal thoughts**
  - **3. Delusions**
  - **4. Distorted self-image**
- **III. Emotional**
  - **1. Dejected mood**
  - **2. Crying spells**
  - **3. Self-abasement**
  - **4. Loss of gratification**
  - **5. Detachment from friends and family**
  - **6. Feelings of inadequacy**
- **IV. Motivational**
  - **1. Loss of interest in professional and personal activities**
  - **2. Negative expectations**
  - **3. Loss of positive motivation**
  - **4. Increased dependency needs**

Depressed patients seen in medical practice frequently present with symptoms suggestive of physical illness. A careful anamnesis may reveal a change in mood which patients attribute to their physical problems. Severe localized or generalized pain may be the focus of the patients' concern. However, physical examination may fail to account for the symptom or if there are positive findings, they may be discordant with the magnitude of the patients' complaints.

Depressed patients do not always report a subjective change in mood. In Beck's series, only 53% of patients suffering from mild depression acknowledged feeling unhappy or sad in spite of core signs and symptoms of depression. Kennedy and Wiesel[5] coined the term "depressive equivalents" in their description of patients with somatic complaints typical of those seen in depressive disorders, yet who did not present with the characteristic alteration of mood. Such patients who present with depressive equivalents are said to suffer from "masked depression." Although the majority of complaints are of a psychological nature, many are medical. Typical complaints are: "headaches," "upset stomach," "breathing difficulty," and "pain all over."

It is important that the clinician guards against dismissing the physical complaints of depressed persons as neurotic symptoms. As a general principle in every case in which a patient presents with core signs and symptoms suggestive of a depressive disorder, contributing physical factors should be kept in mind. A careful examination is in order to rule out a depression secondary to medical problems, e.g., endocrine disturbances, neoplasms, vascular disease, Parkinsonism and many others.

We would agree with Appleton[6] that it is imperative that the clinician distinguish between fact and fancy when formulating a rational plan for the psychotherapeutic management of the depressed patient. We stress that although drugs can be valuable in the treatment of the major affective disorders, the treatment of choice for the neurotically depressed patient is a supportive psychotherapeutic relationship between the physician and the patient. Persons suffering from depressive neuroses are often refractory to antidepressant drugs. Klein[7] states that although most patients suffering from depressive neuroses are refractory to the major antidepressants, an occasional patient shows marked benefit when placed on a tricyclic drug or a MAO inhibitor. Grosser and Freeman,[8] in their studies of the differential recovery patterns of depressed patients, indicate a high placebo response rate in the depressive neuroses.

The drug industry reifies Paul Ehrlich's concept of the "magic bullet" and perpetuates a myth in which a particular drug acts selectively on a specific target symptom. Thus, "specific psychotropic drugs are described as directly altering specific emotional states and effecting specific psychological processes. . . . Hence Librium is claimed to 'reduce anxiety'; Compoz to 'calm the nerves'; and Elavil to 'lift depression.' "[9]

The physician who succumbs to such advertising may contribute to the contemporary trend of dealing with problems of living by an escape through the ingestion of drugs. In this regard, Lennard cautions that "the pharmaceutical industry, in its communication with physicians, all too often practices mystification in relabeling an increasing number of human and personal problems as medical problems." They cite Pillard's testimony before Congress in which he testified that drug advertisements often imply "that antidepressant therapy is indicated in the griefs of everyday life" and are "part of a trend to suggest the use, both of antidepressants and tranquilizers, not only for specific mental illness but to soothe life's ordinary woes."

The physician who treats the patient suffering from a depressive neurosis with amphetamines in the morning and barbiturates at night runs the risk of fostering an iatrogenic intoxication, provides his patient with a suicidal weapon and may expose the patient to a possible amphetamine psychosis.[10] Target symptoms such as insomnia or anxiety may be judiciously treated with sedatives or "minor" tranquilizers. It should be recognized, however, that the temporary relief that they afford may be tempered by their side effects, for all drugs act not only on multiple behavioral levels but on various biochemical systems.

Antidepressant drug therapy should be considered a valuable adjunct to a comprehensive treatment plan which stresses a supportive psychotherapeutic relationship between physician and patient. To the depressed patient, an attitude of confidence and optimism on the part of the physician is comforting and reassuring. Since improvement is the rule rather than the exception in the treatment of depression, with attentive and judicious therapeutic planning, there is every reason to expect a good prognosis.

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Staphylococcus Epidermidis

(Continued from page 244)

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MICHAEL HAHN, M.D., ASA BARNES, JR., M.D.
WILLIAM LERNER, M.D. *and* GLORY SANDBERG, M.D., *Columbia*

Chronic Lymphocytic Leukemia, Disseminated Histoplasmosis and Pneumococcal Septicemia

Case Report

PATIENTS with chronic lymphocytic leukemia frequently manifest defects in both cellular and humoral immunity.[1] Consequently, they may acquire infections characteristic of both types of defect. Coexistent fungal and bacterial infections in the immunologically defective patient may pose diagnostic pitfalls.

In the following case report, the presenting complaint was fever of unknown origin. The dramatic demonstration of fungi in peripheral blood neutrophiles allayed enthusiasm for continuing search for other etiologic agents. After brief improvement with antifungal therapy the patient succumbed to a bacterial septicemia.

CASE REPORT

A 71-year-old farmer's wife was transferred to the University of Missouri-Columbia Medical Center because of chills and fever. Four years previously, a diagnosis of chronic lymphocytic leukemia had been made on the basis of a white blood cell count of 78,400 that was 90% lymphocytes. The patient was asymptomatic until seven months prior to admission when she noted malaise and lymphadenopathy. Three weeks before admission, nightly fever, chills and sweats began. The patient had been hospitalized and treated with 60 mg of prednisone for five days and a seven-day course of cephalothin without effect on her fever before being transferred to the Medical Center.

On admission, her temperature was 103.4 F; pulse rate was 96; and respiration rate was 16. Physical findings included ecchymoses over the left lower leg and at venipuncture sites, three ulcerations of the palate measuring 0.5 cm in diameter and covered by green-gray exudate, cervical and axillary lymphadenopathy and a palpable splenic tip but no hepatomegaly.

Histoplasma capsulatum yeast forms were identified within the cytoplasm of neutrophiles in the peripheral blood (Fig. 1). Significant laboratory studies included a white blood cell count of 131,000, 99% of which were small lymphocytes. Platelet count was 40,000/cu mm and the hematocrit reading was 33%. Serum total protein was 6.8 gm%; albumin was 2.3 gm%. Quantitative immunoglobulins were IgG 2.2 gm% (normal: 0.9-1.5 gm%); IgA 0.3 gm% (normal: 0.17-0.41 gm%); IgM .09 gm% (normal: 0.05-0.11 gm%). Spinal fluid showed no organisms on India ink examination. Chest X-ray was within normal limits. The bone marrow contained sheets of lymphocytes compatible with the diagnosis of chronic lymphocytic leukemia. *H. capsulatum* yeast forms were present in marrow histiocytes. Cultures of blood, spinal fluid and bone marrow all produced growth of *H. capsulatum*. No other organisms were cultured.

The patient was treated with increasing daily intravenous doses of Amphotericin B, beginning with 1 mg, proceeding to 5 mg, then to 10 mg, 20 mg and, on the day of her death, 30 mg. Prednisone, 60 mg daily, was continued. On the second hospital day, oozing occurred at venipuncture sites. Fundoscopic examination revealed multiple fresh fundal hemorrhages. The platelet count was 32,000/cu mm; fibrinogen 200 mg%; partial thromboplastin time 37/30 (patient/control expressed in seconds); prothrombin time 14/12; thrombin time 22/17; and fibrin split products were not detected. The patient received 6 units of platelet concentrates; 15,000 units of heparin intravenously every six hours

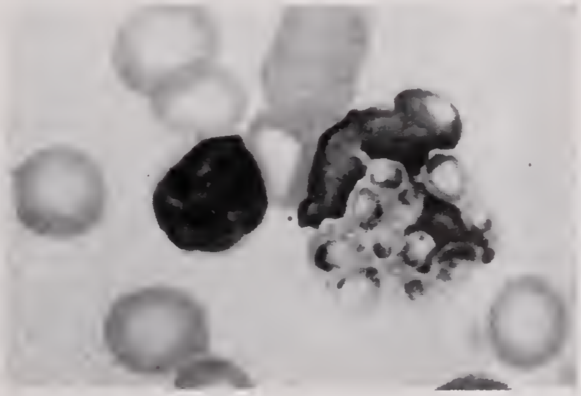

Fig. 1 ***Histoplasma capsulatum*** **organisms in a peripheral blood neutrophil (Wright's stain × 1200).**

Both cellular and humoral immunity may be defective in patients with chronic lymphocytic leukemia. The patient discussed in this paper had *Histoplasma capsulatum* demonstrated in peripheral blood neutrophiles. After brief improvement on antifungal therapy, she rapidly succumbed to *Pneumococcal* septicemia. Continual evaluation of these patients is crucial because of the possibility of coexistent fungal and bacterial infections. Drs. Hahn, Barnes and Sandberg are from the Department of Pathology and Dr. Lerner is from the Department of Medicine, University of Missouri School of Medicine.

were initiated for presumed disseminated intervascular coagulation. There was no further bleeding.

Her hospital course over the first four days was characterized by gradual reduction of fever, improvement of her mental status and good urine output. *H. capsulatum* continued to be present in her peripheral blood neutrophiles. On the fifth hospital day, a 105 F fever spike occurred. She rapidly became hypotensive with a marked decrease in urinary output. Cyanosis ensued and the patient died.

Postmortem examination revealed extensive lymphocytic infiltration of the spleen (510 gm), liver (1,710 gm), kidneys (right 200 gm, left 210 gm), lymph nodes and bone marrow. There also was heavy infiltration of the subendocardium, lungs and gastrointestinal tract. The spleen and lymph nodes were massively infiltrated by lymphocytes. Germinal centers had been obliterated, but there were occasional small foci of necrosis associated with localized plasma cell infiltrates. *H. capsulatum* organisms were numerous in swollen reticuloendothelial cells in the lungs, spleen, liver, lymph nodes and bone marrow. The lungs showed bilateral fibrinous pneumonitis. *Diplococcus pneumoniae* organisms were present in large number within vessels of all sizes in all of the tissue examined. Disseminated intravascular coagulation was manifested by small fibrin thrombi in many pulmonary arterioles, multiple recent, small infarcts of kidneys, liver and spleen and thrombosis of the left radical of the portal vein. Cultures of pericardial pleural and ascitic fluid, heart blood, lung, spleen and brain were obtained at postmortem. All of these grew *D. pneumoniae. H. capsulatum* did not grow from the postmortem specimens.

COMMENT

Patients with lymphoreticular diseases, such as chronic lymphocytic leukemia, have poor immunologic defenses.[2] They may have reduced primary and secondary antibody responses, qualitatively defective antibodies and some loss of delayed hypersensitivity. Anergic response to agents normally stimulating delayed hypersensitivity has been reported.[1] Infections occurring in patients with these defects of both cellular and humoral immunity may be caused by bacteria, fungi, viruses and protozoa.[2] Disseminated histoplasmosis occurs in patients with the leukemia-lymphoma group of diseases and those undergoing steroid therapy.[3–5] Rapid diagnosis is essential in these debilitated patients with compromised host defenses. Amphotericin B, the effective agent for therapy, has marked toxicity necessitating diagnosis before treatment is begun. Culture or histologic study of bone marrow, liver, sputum or buccal mucosa are the usual methods of proving the diagnosis.[6] Only rarely is the diagnosis of disseminated histoplasmosis made by identifying the yeast forms in the peripheral blood.[7–9]

The continual evaluation of these patients is crucial. Sudden deterioration may mean a worsening of the underlying disease, ineffective treatment of histoplasmosis or the presence of yet another microorganism. This patient illustrates and emphasizes the last category, coexisting fungal and bacterial infections in patients with chronic lymphocytic leukemia.

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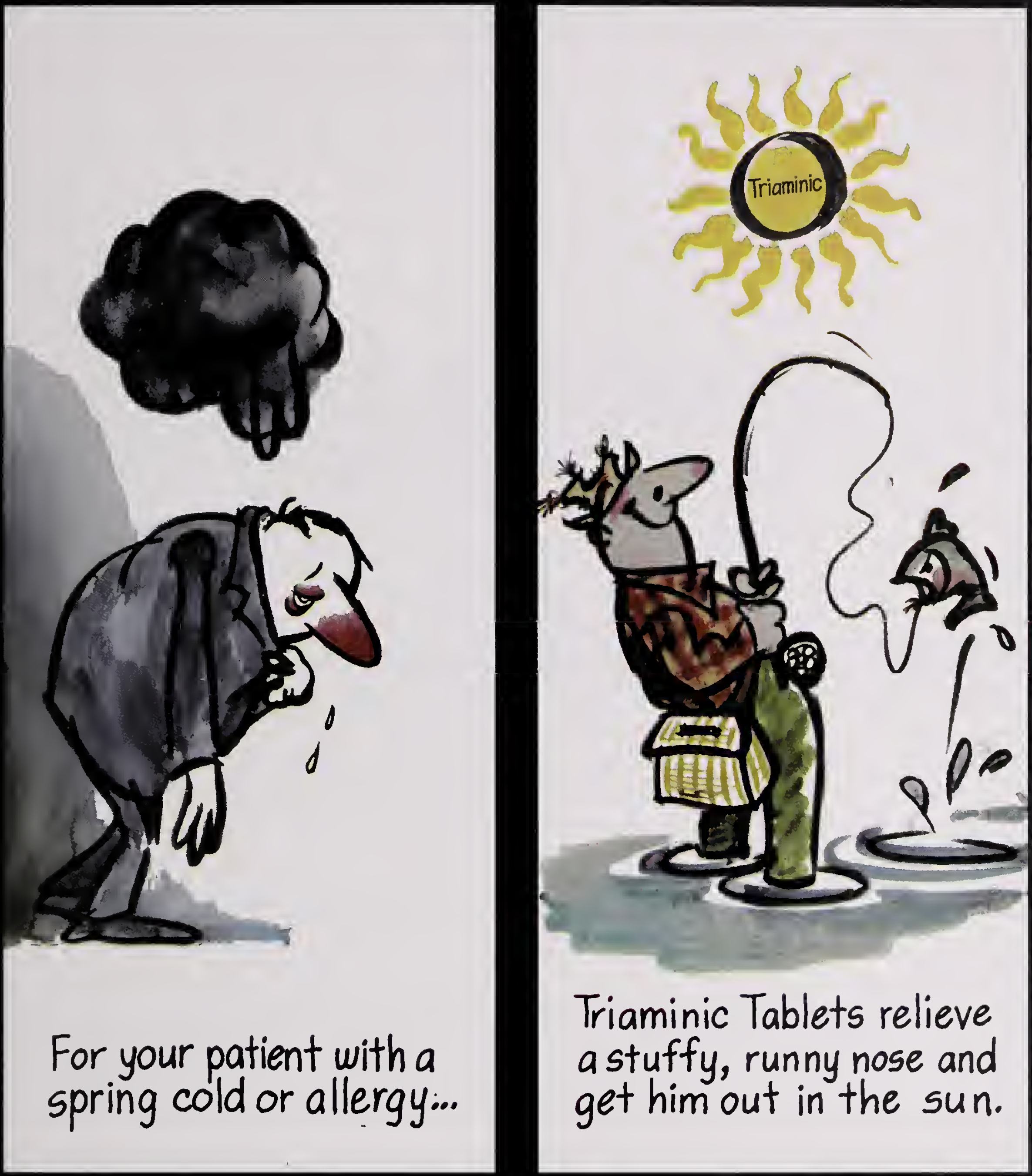
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>
> *–George Sarton, from "The History of Medicine Versus the History of Art"*

Are there significant differences in bioavailability and clinical predictability among drug products?

Opinion

Results of a questionnaire to 7,000 physicians:

44.6%
Agree there is a significant difference

24.9%
Believe there is no difference

30.5%
Had no opinion

Are there significant difference in bioavailability and clinica predictability among drug products

Teacher of Medicine

Alfred Gilman, Ph.D.
Wm. S. Lasdon
Professor & Chairman
Department of
Pharmacology
Albert Einstein
College of Medicine of
Yeshiva University

I think that there can be a very great distinction between generic drugs and brand name drugs. And that applies to products of original research that have outlived their patent protection as well as to drugs that have long been in the public domain. Let me explain why.

The Importance of the Manufacturing Environment

In terms of formulation, quality control, and the ability to reproduce an essentially identical product, batch after batch, I doubt that many firms are properly equipped to put out a product that is as carefully controlled as the product marketed by a pharmaceutical company with sophisticated research and high quality manufacturing facilities. For example, when a company comes out with its own preparation of a drug that has just lost its patent protection, there is no assurance that the drug it produces will be a therapeutic equivalent. The raw material could be identical and yet bioavailability might vary from complete unavailability to that which is equivalent to the original.

It Isn't Enough to Meet USP and NF Standards

Meeting USP and NF standards is not enough to guarantee therapeutic equivalence. In certain instances, stricter standards must be applied. Right now, the New York Heart Association has a committee that is studying the problem of digoxin equivalency. I am certain that they are going to recommend a bioavailability assay of a particular digoxin. Unless this is done, they will not recommend it for purchase or use in New York City hospitals. It represents too much of a hazard. They have gone so far as to recommend a batch-by-batch certification of bioavailability even though the company has been reproducing and marketing a digoxin product through the years.

The Problem of Controlling Bioavailability of Generics

The FDA does not have the manpower to inspect the quality control capabilities of hundreds of houses specializing in generic products. And I don't think that the average pharmacist is knowledgeable or aware of the quality and bioavailability of the infinite numbers of generic preparations. A recommendation has been made that every time a generic house (or for that matter a large pharmaceutical company) markets an already existing drug for the first time, a modified new drug application should be submitted. The manufacturer would have to show that his compound is the therapeutic equivalent of the standard compound in use, assuming that the standard compound is one that has been available for an extended period—say 15 years. This would be one indication that the control of bioavailability is beginning to get the attention that it deserves.

Clinical Predictabilit
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Growing Awareness of Potential for Nonequivalence

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minimize nonequivalence of drug components produced by different manufacturers. Arguments relate largely to the extent of product inequivalences. Experience over the past six years has uncovered a greater incidence of nonequivalence of products prepared by different manufacturers from generically equivalent substances than many had previously surmised.

Newer Bioavailability Studies Reveal Differences

Bioavailability may be defined as a measure of the rate and amount of absorption of a drug substance from its administered dosage form. For several years pharmaceutical scientists have proposed that bioavailability data on presumably equivalent dosage forms provide the best measure of product equivalence—short of adequate clinical trial. In their continued search for shortcuts to the evaluation of product equivalence, medical and pharmaceutical scientists have increasingly relied upon bioavailability characteristics as reflected by blood levels of a drug after its administration to human subjects.

Leading manufacturers now conduct comparative bioavailability studies on their own product dosage forms after production process changes that would have been considered inconsequential a few years ago. This isn't surprising, since there are so many possible differences in production operations that the opportunities for inequivalent generic and brand name products are numerous—even when the production process begins with identical chemical substances. Moreover, reputable manufacturers are striving to improve *in vitro* control measures, such as dissolution characteristics, which are being related more meaningfully to bioavailability reference data.

As a result of advances in scientific instrumentation and analytical methodology which permit measurements of small quantities of drug substances in the body, our abilities to detect differences in bioavailability and possible therapeutic nonequivalance have appreciably improved.

Product Selection Based on Patient Response

Improved specifications and standards can better assure the equivalence of *drug substances*. Manufacturers, compendia and regulatory agencies can all play a part. However, it is the *drug product*, not the *drug substance*, that the physician, pharmacist, nurse and patient-customer utilize. How can these individuals make or influence specific product selections to minimize variations in therapeutic equivalence of multisource drugs? Patients' responses to a drug product provide a basis of experience to aid the physician in his selection of a particular product. The nurse and pharmacist can also help detect patient responses, but ultimate responsibility must remain with the physician.

Reputation of Manufacturer as Basis for Product Selection

The physician, to assure that his patients receive quality health care, must rely upon the capabilities of the reputable pharmaceutical manufacturer who is equipped to develop, prepare and control a quality product of uniform, reliable therapeutic performance. Substitution with purportedly equivalent generic products that are only superficially evaluated by an imitator manufacturer can place the health of the patient secondary to factors of price or convenience for the provider.

Opinion & Dialogue

What is your opinion, doctor?
We would welcome your comments.

P·M·A

The Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005

Integument!

Our skin—the human integument—covers us, defines us, protects us. But skin is subject to cuts, burns, abrasions. And infections. Neosporin Ointment fights infection by providing broad antibacterial action against susceptible skin invaders. It contains antibiotics that are rarely used systemically, reducing the risk of sensitization.

INDICATIONS: *Therapeutically*, used as an adjunct to appropriate systemic therapy for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

PRECAUTION: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Complete literature available on request from Professional Services Dept. PML.

NEOSPORIN® Ointment

(POLYMYXIN B-BACITRACIN-NEOMYCIN)

Each gram contains: Aerosporin® brand Polymyxin B Sulfat 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 m (equivalent to 3.5 mg. neomycin base); special white petrolatu q.s. In tubes of 1 oz. and ½ oz. and $\frac{1}{32}$ oz. (approx.) foil packet

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

President's Message

What do the MSMA and the AMA do for ME? I would gladly trade in my Keogh Plan money for $1 for each time I have been asked that question in the past year.

On March 8-11, 25 Missourians attended the AMA Political Action meeting in Washington, D. C. As is customary, we were briefed for three hours on Friday morning, March 9, by eight members of the AMA office in Washington. Out of this session came the following facts and predictions: (1) There is a PSRO task force implemented by the AMA and complemented by the American Hospital Association and the American Nursing Home Association. Dr. Hector W. Benoit, Jr. of Kansas City is a member. (2) Dr. John R. Kernodle testified before a congressional committee on January 15. He pointed out that all doctors had stayed beneath the 2.5% Phase II deadline. (3) The AMA's present goal is to obtain more signers for the Medicredit Bill than all the other programs together. At the present time there are 171 Congressional sponsors of Medicredit out of a possible 400.

Walter T. Gunn, M.D.

At noon, we sponsored a luncheon for the Senators and Congressmen from Missouri. Of the total of 12, five attended personally and six, who were out of town, sent staff representatives. We were greatly encouraged by their comments. All agreed that the doctor is more knowledgeable in health affairs than anyone else. They opined that there will be some health legislation in 1974. Any HHI bill will be a compromise between the Kennedy Bill and Medicredit. As one AMA speaker warned, "Don't forget. A compromise between one inch and one mile is one-half mile which is a long way from one inch." Also, enactment of the Kennedy Bill would mean the death of "The Blues" and the Health and Hospitalization Industry.

The big question regarding HMO legislation is "If HMO's provide such a better and more economic manner of practicing medicine, why do they require a $5 billion subsidy?" The Physicians Placement Service reported more than 4,500 registrations with 3,100 placements. Nobody is surprised that the largest physician surplus was in surgery; the largest opportunity surplus was in family practice.

A NHI will be consummated in 1974. How often have I been told "I'm too busy." Your livelihood and existence are at stake in the next 18 months. They will be determined in the Congress of the United States. KNOW AND SUPPORT YOUR CONGRESSMEN. HEW is in the throes of reorganization. Contact your Representative and express your feelings.

Woman's Auxiliary

It has been said that our days are all the same size, like identical suitcases. It's just that some people can pack more into them than others.

If this idea is applied to years, as well as days, I believe you'll agree that the members of our county medical society auxiliaries and your MSMA Woman's Auxiliary should be congratulated for being the greatest "year packers" of them all.

Mrs. Keith D. Jones
President

Here is a partial review of their accomplishments in 1972-1973:

- First *Legislative Day*—Members of the Auxiliary from all parts of the state gathered in Jefferson City to visit the Missouri House of Representatives and Senate, entertain members of the House and Senate Public Health committees at luncheon, visit with representatives of their individual districts and tour the historic Governor's Mansion.
- First *Health Education Day*—The MSMA Woman's Auxiliary was the first state auxiliary to sponsor a Health Education Day. This event was held in conjunction with our annual Fall Conference in Columbia and was co-sponsored by the MSMA Council. Representatives from 70 other state organizations were invited to participate. The program is now being offered by the AMA Auxiliary as a pattern for other state auxiliaries.
- First *Public Affairs and MMPAC Chairmanship*—Mrs. James A. (Pat) Reid of Marshall served in this first chairmanship in the Woman's Auxiliary. We report more than a 1,000% increase in our AMPAC-MMPAC memberships for the year. The Auxiliary also held a mid-winter board meeting and participated in the MSMA Public Affairs Conference in Jefferson City.
- *Cooperation*—Better working relationships and communications with the MSMA Council were established. Appointed members of the Woman's Auxiliary will attend meetings of the MSMA Council and certain MSMA commissions and committees.

Actually, there are too many Auxiliary activities and projects to report on this page. Among them are the Auxiliary's participation in AMA Auxiliary programs, participation in the organization of the Missouri Uterine Task Force and continuation of work on behalf of health careers and drug education.

It has been an inspiring and rewarding year. As President of the Woman's Auxiliary, I extend my deep appreciation to the MSMA Officers and Council, the staff in Jefferson City and the members of the Auxiliary for their interest and invaluable cooperation and salute the auxiliary members for accomplishing so much in one year.

EDITORIALS

CHANGE IS ETERNAL!

While most of us would agree with the above, the majority of physicians tend to be passive rather than active in what is going on in the world around them. During the past year, the St. Louis County Medical Society has shown change in that the meeting pattern reverted to monthly gatherings, most of which were well attended, especially where the personal interests of the physicians were concerned.

In hospital corridors, social gatherings and wherever physicians meet, there is talk of "socialized medicine, the changing order of things, take over by universities, HMOs and now HR-1." My personal experience in such gatherings has been only to hear various mutterings from physicians, sometimes regretful and sometimes angry. "It is easy to criticize Senator Kennedy and others seeking social change, but mere disagreement is in no way constructive or helpful."

It is a rare experience for doctors to get together and help make the wheel go in the direction it should, namely, in such a way that it will benefit not only the practice of medicine but directly benefit the community.

Many doctors have become too busy to attend to the matters above and to a large degree have abdicated these functions to social scientists and politicians. Texas Congressman Burleson recently observed that doctors do not write their congressmen. The legislators ARE interested! In addition to writing congressmen, much more would be accomplished by active participation in your medical society so that knowledgeable forces could guide and assist those concerned with health care problems.

It is true that the American physician is held in high esteem by the community. This status must be preserved and we physicians can help preserve it by moving in a positive direction. We must not ignore the problems that exist in the practice of medicine. It will only antagonize the consumer rather than help the cause of the physician if we are obstructive rather than constructive.

Let us, as physicians, unite and use the already present and potentially powerful frameworks of the medical societies, both local and national, to express our views. Since change IS eternal, let us, as interested and dedicated physicians, be forces in change for the better, not only for our profession, but for all people.

JACK R. EIDELMAN, M.D., St. Louis
St. Louis County Medical Society Bulletin

AMA LEGISLATIVE DEPARTMENT—A VITAL SERVICE

The American Medical Association's Legislative Department provides a vital service to member physicians all across the country. At the same time, it is regarded by many as one of the most substantial of the intangible benefits which the AMA offers to its membership.

The Legislative Department staffs the AMA Council on Legislation and specializes in all phases of national legislation. After studying, analyzing and interpreting all Congressional legislation pertaining to medical and health care, the department makes available this information to state, county and specialty medical societies, members of the public and other organizations. This usually totals about 2,300 bills of medical interest per Congress. An increased responsibility of this department is the critical review of government regulations which often seriously affect application of law. There are few physicians who could devote the time necessary to accomplish this on their own and, yet, this information is vital because it affects the way medicine is practiced in this country.

To keep key medical leadership aware of legislative developments when Congress is in session, the department writes, publishes and distributes *Legislative Round-Up* weekly to approximately 5,000 key state, county and specialty medical society officers.

Another vital activity is the assistance given to AMA Officers in the preparation of testimony and presentations for Congressional hearings. The Legislative Department works with the appropriate AMA scientific personnel to gain the benefit of their expertise before assembling any presentation. The Council on Legislation can then use this resource material to formulate a sound recommendation as to the best policy position for the AMA. Many people do not realize the AMA is often requested to testify because its views are valued not only by Congress but by the various governmental agencies.

The department also assists in the development, writing and presentation of draft legislation for consideration by members of Congress, such as the AMA's own national health insurance bill, MEDI-

(Continued on page 256)

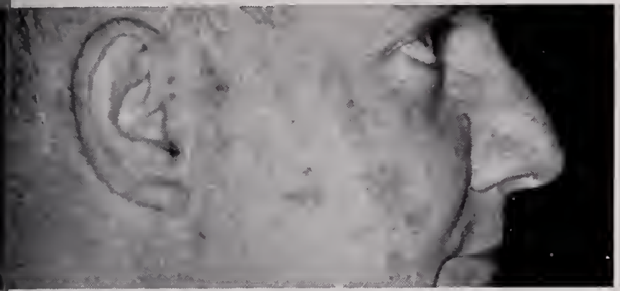
What's
on your
patient's
face...

may be more important than
his chief complaint

e lesions on his face may
solar/actinic—so-called
nile" keratoses...and
ey may be premalignant.

lar, actinic or senile keratoses

ese lesions may be called by several names, but they
ally can be identified by the following character-
cs: the typical lesion is flat or slightly elevated, of a
wnish or reddish color, papular, dry, rough, adherent,
sharply defined. They commonly occur as multiple
ons, chiefly on the exposed portions of the skin.



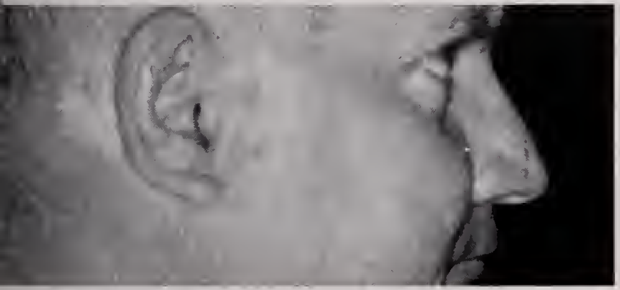
tient P.T. seen on 3/29/67 shows typical lesions of
derately severe keratoses. Note residual scarring on
ge of nose from previous cryosurgical and electro-
gical procedures.*

equence of therapy/ lectivity of response

er several days of therapy with Efudex® (fluorouracil),
thema may begin to appear in the area of the lesions;
reaction usually reaches its height of unsightliness
d discomfort within two weeks, declining after dis-
ntinuation of therapy. This reaction occurs in affected
as. Since the response is so predictable, lesions that
not respond should be biopsied.

cceptable results

eatment with Efudex provides highly favorable cos-
tic results. Incidence of scarring is low. This is
rticularly important with multiple facial lesions.
udex should be applied with care near the eyes, nose
d mouth.



atient P.T. seen on 6/12/67, seven weeks after discon-
uation of 5%-FU cream. Reaction has subsided.
esidual scarring not seen except for that due to prior
rgery. Inflammation has cleared and face is clear of
ratotic lesions.*

ata on file, Hoffmann-La Roche Inc., Nutley, N.J.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.
Contraindications: Patients with known hypersensitivity to any of its components.
Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.
Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.
Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.
How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.
Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

This patient's lesions were resolved with

Efudex®
(fluorouracil)

5% cream/solution
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Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Editorials

(Continued from page 253)

CREDIT. They also assist in the development of presentations to the regulatory agencies.

The staff participates in providing legislative orientation to the AMA's Councils and Committees as well as to members of the profession who are in Washington, D. C. to visit members of Congress.

Finally, the department has undertaken the monitoring of state legislation with a view towards eventually assisting the profession to attain its legislative goals on a state as well as on a national level.

From Medicaid and Medicare regulations to chiropractic issues, national health insurance and appropriations for HEW programs, federal and state medical and health care legislation affects all physicians in some way. The AMA's Legislative Department maintains constant surveillance and provides AMA physician policy makers with accurate and up-to-date information. The leadership of organized medicine can make their judgments and represent AMA's membership with a sound base of resources.

Ninth Councilor District Holds Annual Meeting

Physicians and their wives from 14 South Central Missouri counties attended the annual meeting of the MSMA Ninth Councilor District on February 28 at Holiday Inn in West Plains.

Dr. Claude W. Cooper of Thayer, Ninth District Councilor, presided at the dinner and meeting. Special guests were Walter T. Gunn, M.D., St. Louis, President of the Missouri State Medical Association; E. A. Stricker, St. James, President-Elect; and Mrs. Keith D. Jones, Warrensburg, President of the Woman's Auxiliary to the MSMA.

Guest speakers from the University of Missouri-Columbia were Paul R. Young, M.D., Medical Director of Continuing Education for Health Professions; Daniel Winship, M.D., Professor of Medicine and Chief of the Department of Gastroenterology; and Guilio J. Barbero, M.D., Professor and Chairman of the Department of Pediatrics. Each discussed subjects related to his respective department.

Dr. Gunn spoke to the group and discussed medical information on the state level.

Counties in the Ninth District of the MSMA are Carter, Crawford, Dent, Douglas, Howell, Laclede, Maries, Oregon, Ozark, Phelps, Pulaski, Shannon, Texas and Wright.

Five National Otolaryngology Societies Meet in St. Louis

Five national otolaryngology societies will hold their annual scientific meetings on April 1-7 at the Chase-Park Plaza Hotel in St. Louis.

The American Broncho-Esophagological Association; American Laryngological Association, Inc.; American Academy of Facial Plastic and Reconstructive Surgery, Inc.; American Laryngological, Rhinological and Otological Society, Inc. (The Triological Society); and American Otological Society, Inc. will participate in this series of meetings which will constitute the largest national congress this year devoted exclusively to scientific advances in otolaryngology.

More than 1,000 otolaryngologists have been attending the sessions held consecutively to avoid schedule overlap.

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County Society News

FIRST DISTRICT

COUNCILOR
JOHN N. MARTIN, M.D., ST. JOSEPH

Buchanan County Medical Society

The annual "Heart" meeting of the Buchanan County Medical Society was held in the Empire Room of Hotel Robidoux in St. Joseph on February 7.

Following the dinner, Dr. Bernard S. Lipman, Atlanta, Ga., spoke on "Controversies in the Management of Heart Attacks—1973." A native of St. Joseph who is now practicing cardiology in Atlanta, Dr. Lipman has written texts on cardiology which are now in use in various medical schools. A graduate of Washington University School of Medicine, he has served as associate professor of clinical medicine at Emory University School of Medicine; director of the Heart Station of St. Joseph Hospital; codirector of Glenville Giddings Heart Clinic; visiting physician and consultant in cardiology at the Grady Memorial Hospital; area consultant in cardiology to the Veterans Administration; and consultant in cardiology to the U. S. Department of Health, Education and Welfare in Atlanta.

Dr. Lipman was introduced by Dr. Wallace McDonald, who recently began practicing in St. Joseph following a residency in internal medicine at Emory University Medical School in Atlanta.

G. Tyson Carpenter, M.D., *Secretary*

Clay County Medical Society

Dr. Daniel C. Boone was installed as President and Dr. Felix A. Pileggi was installed as President-Elect of Clay County Medical Society at the Annual Presidents' Dinner at Rodeway Inn in North Kansas City on January 30.

Immediate Past-President Paul Revare presided at the annual event which was attended by 56 members and guests.

Other officers installed for the new year are Drs. Richard C. Hedges, Vice-President; Emmet K. Burke, Secretary-Treasurer; Donald A. Fakhoury, Robert J. Gauer and Carl R. Slaughter, Executive Committee; Philip E. King, Van M. Robinson and Lawrence L. Hayes, Board of Censors.

Delegates to the MSMA Annual Session are Drs. Richard P. Bowles, Chris K. Fotopoulos and Donald E. Kuenzi. Alternate Delegates are Drs. Truman B. Schertz, Richard C. Hedges and Charles I. Fowler.

MSMA Assistant Executive Secretary Royal O. Cooper *(center)* with Retiring President Paul Revare *(left)* who installed President Daniel Boone *(right)* at the Clay County Medical Society Annual Presidents' Dinner.

Guest speaker for the evening was MSMA Assistant Executive Secretary Royal O. Cooper who reviewed bills now before the Missouri House of Representatives and Senate.

Dr. Schertz reported on HB 314 concerning the use of nonlicensed technicians in the doctor's office. Mrs. William McPhee discussed "Meals on Wheels," a hospital auxiliary program which delivers one meal a day to handicapped and housebound residents.

Emmet K. Burke, M.D., *Secretary*

SECOND DISTRICT

COUNCILOR
LYSLE M. BACH, M.D., HANNIBAL

Chariton-Macon-Monroe-Randolph County Medical Society

The regular monthly meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held on February 8 in the library of Woodland Hospital in Moberly.

Dr. Robert H. Young, President, presided. Guests at the meeting were Dr. Walter T. Gunn, St. Louis, President of the Missouri State Medical Association; Dr. Lachance, Centralia; MSMA Executive Secretary Raymond McIntyre and Mrs. McIntyre; and Assistant Executive Secretary Royal O. Cooper of Jefferson City.

Dr. Robert V. Tompson, Secretary, notified members of correspondence relative to proposed constitutional changes of the MSMA Council Report and a request from Dr. E. D. Imes, Speaker of the House of Delegates, for resolutions.

President Young then introduced Dr. Gunn who spoke on activities of the MSMA. He pointed out many recent activities in which the Association has been engaged.

Mr. Cooper then presented an update of current legislative proposals now before the Missouri Legislature and Senate.

Mr. McIntyre discussed various recent changes in the MSMA Journal and referred to the up-to-the-minute news supplement which is now inserted in each copy.

Members present were Drs. F. L. Harms and D. D. Stuart, Chariton County; James Campbell and Don Eggleston, Macon County; F. A. Barnett, Monroe County; Josephine Baker, W. D. Chute, C. C. Cohrs, L. E. Huber, R. V. Tompson and R. H. Young, Randolph County.

Robert V. Tompson, M.D., *Secretary*

Missouri Surgeons' Meeting Scheduled for June 1-2

The Missouri Chapter of the American College of Surgeons will hold its annual professional meeting on June 1-2 at the Crown Center Hotel in Kansas City.

Papers will be presented by some of Missouri's outstanding physicians. A tour of Children's Mercy Hospital in Kansas City will be a feature of the program this year.

The Missouri Chapter's professional meeting is open to all members of the medical profession. To be in attendance, reservations should be made for the nights of May 31 and June 1. Reservations for both family and guests of members of the Chapter will be welcomed.

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MEDICAL
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St. Louis, Mo.

Topeka — Kansas City — Wichita

New Members

Ansar H. Ansari, M.D., 6150 Oakland, St. Louis, has become a member of St. Louis Medical Society. Dr. Ansari is a native of Yusutpur, India, received his preliminary education at M. U. Aligarh and his M.D. degree at Maulana Azad Medical College in 1966. He specializes in general surgery.

Chusak Banjastikul, M.D., 2821 N. Ballas Rd., St. Louis, has become a member of St. Louis County Medical Society. Dr. Banjastikul is a native of Thailand, received his preliminary education at Chulalongkorn University and his M.D. degree at Chulalongkorn Hospital in 1964. He specializes in plastic surgery.

Cristeta Barbo-Mencias, M.D., 3015 N. Ballas Rd., St. Louis, has become a member of St. Louis County Medical Society. Dr. Barbo-Mencias is a native of Zambales, Philippines, received his preliminary education at the University of the Philippines and his M.D. degree at Far Eastern University in 1964. He specializes in obstetrics and gynecology.

Kenneth J. Bennett, M.D., 4919 Forest Park, St. Louis, has become a member of St. Louis Medical Society. Dr. Bennett is a native of New Orleans, La., received his preliminary education at Tulane University and his M.D. degree at Tulane University in 1965. He specializes in general surgery.

Marcos Calderon, M.D., 911 S. Brentwood, St. Louis, has become a member of St. Louis Medical Society. Dr. Calderon is a native of Tampico-Tam, Mexico. He received his M.D. degree at Escuela De Medicina De Tampico in 1965. He specializes in ophthalmology.

Tzi-Chorng Chung, M.D., 2601 N. Whittier, St. Louis, has become a member of St. Louis Medical Society. Dr. Chung is a native of Taiwan, received his preliminary education at National Taiwan University and his M.D. degree at Kaohwiung Medical College in 1966. He specializes in otolaryngology.

Thomas P. Cooper, M.D., 3809 Union Blvd., St. Louis, has become a member of St. Louis Medical Society. Dr. Cooper is a native of Sullivan, Ind., received his preliminary education at DePauw University and his M.D. degree at Indiana Medical School in 1970. He specializes in industrial medicine.

Donald W. Daut, M.D., 200 E. Monroe, Mexico, has become a member of Audrain County Medical Society. Dr. Daut is a native of East St. Louis, Ill., received his preliminary education at St. Mary's University and his M.D. degree at the University of Missouri in 1969. He specializes in internal medicine.

Romeo R. Eugenio, M.D., Perry Plaza Medical Center, Perryville, has become a member of Perry-Ste. Genevieve Counties Medical Society. Dr. Eugenio is a native of the Philippines, received his preliminary education at Far Eastern University and his M.D. degree at Far Eastern University in 1962. He specializes in general practice.

Frank W. Farrell, M.D., 105 Northland Medical Bldg., St. Louis, has become a member of St. Louis Medical Society. Dr. Farrell is a native of Raleigh, N. C., received his preliminary education at the University of North Carolina and his M.D. degree at Bowman Gray School of Medicine in 1962. He specializes in diagnostic radiology.

Purificacion T. Florendo, M.D., 5505 Delmar, St. Louis, has become a member of St. Louis Medical Society. Dr. Florendo is a native of San Fernando La Union, Philippines, received his preliminary education at the University of the Philippines and his M.D. degree at the University of the Philippines in 1946. He specializes in obstetrics and gynecology.

Robert Edward Frazier, M.D., 803 Stadium Rd., Columbia, has become a member of Boone County Medical Society. Dr. Frazier is a native of Boonville, received his preliminary education at the University of Missouri and his M.D. degree at the University of Missouri in 1969. He specializes in psychiatry.

Alberto Grinstein, M.D., 3010 Frederick, St. Joseph, has become a member of Buchanan County Medical Society. Dr. Grinstein is a native of Argentina, received his preliminary education at National School of Commerce and his M.D. degree at the University of Buenos Aires in 1964. He specializes in psychiatry.

Patrick A. Hogan, M.D., 6376 Clayton, St. Louis, has become a member of St. Louis Medical Society. Dr. Hogan is a native of St. Louis, received his preliminary education at St. Louis

University and his M.D. degree at St. Louis University in 1965. He specializes in neurology.

Praphat Hovadhanakul, M.D., 1325 S. Grand Blvd., St. Louis, has become a member of St. Louis Medical Society. Dr. Hovadhanakul is a native of Bangkok, Thailand, received his preliminary education at Assumption College and his M.D. degree at Chulalonghorn Medical School in 1964. He specializes in obstetrics and gynecology.

Richard G. Jaeckle, M.D., 4511 Forest Park, St. Louis, has become a member of St. Louis Medical Society. Dr. Jaeckle is a native of San Antonio, Tex., received his preliminary education at St. Mary's University and his M.D. degree at the University of Texas in 1961. He specializes in psychiatry.

Martin L. Key, M.D., Center Drive and Hospital Lane, has become a member of Perry-Ste. Genevieve Counties Medical Society. Dr. Key is a native of Hamburg, Ia., received his preliminary education at the University of Iowa and his M.D. degree at the University of Iowa in 1971. He specializes in general practice.

Joseph L. Kinzie, Jr., M.D., 216 S. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Kinzie is a native of Roanoke, Va., received his preliminary education at Bridewater College and his M.D. degree at the University of Virginia in 1964. He specializes in internal medicine.

Ercument A. Kopman, M.D., 4989 Barnes Hospital Plaza, St. Louis, has become a member of St. Louis Medical Society. Dr. Kopman is a native of Istanbul, Turkey. He received his M.D. degree at the University of Istanbul in 1947. He specializes in anesthesiology.

Carl R. Krause, M.D., 706 S. Dickerson, Palmyra, has become a member of Marion-Ralls-Shelby County Medical Society. Dr. Krause is a native of Hannibal, received his preliminary education at the University of Iowa and his M.D. degree at State University of Iowa in 1966. He specializes in family practice.

Richard L. McDowell, M.D., 141 N. Meramec, St. Louis has become a member of St. Louis Medical Society. Dr. McDowell is a native of St. Louis, received his preliminary education at St. Marys College and his M.D. degree at St. Louis University in 1966. He specializes in pathology.

Maurice F. Mullins, M.D., 217 W. Broadway, Columbia, has become a member of Boone County Medical Society. Dr. Mullins is a native of New York, N. Y., received his preliminary education at The National University of Ireland and his M.D. degree at The National University of Ireland in 1964. He specializes in diagnostic radiology.

Y. S. Pak, M.D., Box 263, St. Joseph, has become a member of Buchanan County Medical Society. Dr. Pak is a native of Korea, received his preliminary education at the College of Liberal Arts and Sciences and his M.D. degree at Seoul National University in 1959. He specializes in psychiatry.

Susan Pittman, M.D., 777 S. New Ballas Rd., St. Louis, has become a member of St. Louis Medical Society. Dr. Pittman is a native of St. Louis, received her preliminary education at the University of Missouri and her M.D. degree at the University of Missouri in 1964. She specializes in pediatrics.

Dong S. Rhee, M.D., 1325 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Rhee is a native of Korea. He received his M.D. degree at Seoul National University in 1954. He specializes in anesthesiology.

Seoung Eun Rhee, M.D., 2601 N. Whittier, St. Louis, has become a member of St. Louis Medical Society. Dr. Rhee is a native of Seoul, Korea, received his preliminary education at Catholic Medical College and his M.D. degree at Catholic Medical College in 1963. He specializes in general surgery.

Robert H. Riordan, M.D., 11500 Ambassador Dr., Kansas City, has become a member of Platte County Medical Society. Dr. Riordan is a native of Seattle, Wash., received his preliminary education at Willamette University and his M.D. degree at the University of Oregon in 1958. He specializes in aviation medicine.

Daniel Lesem Rosenstein, M.D., 807 Stadium Rd., Columbia, has become a member of Boone County Medical Society. Dr. Rosenstein is a native of Tulsa, Okla., received his preliminary education at the University of Oklahoma and his M.D. degree at Washington University in 1954. He specializes in pathology.

Joseph C. Tsung, M.D., 4911 Barnes Hospital Plaza, St. Louis, has become a member of St. Louis Medical Society. Dr. Tsung is a native of

Tokyo, Japan. He received his M.D. degree at National Taiwan University in 1966. He specializes in obstetrics and gynecology.

Elizabeth Vianzon, M.D., 1225 Graham, Florissant, has become a member of St. Louis Medical Society. Dr. Vianzon is a native of Philippines. She received her M.D. degree at the University of St. Thomas in 1965. She specializes in obstetrics and gynecology.

Joseph Werth, M.D., 917 Leslie Blvd., Jefferson City, has become a member of Cole County Medical Society. Dr. Werth is a native of East St. Louis, Ill., received his preliminary education at St. Louis University and his M.D. degree at St. Louis University in 1963. He specializes in dermatology.

John F. Woods, M.D., 310 W. Gabriel, Advance, has become a member of SEMO County Medical Society. Dr. Woods is a native of Sharon, Pa., received his preliminary education at the University of Tennessee and his M.D. degree at the University of Tennessee in 1971. He specializes in general practice.

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Missouri Medicine in Review

FORTY YEARS AGO

Dr. Rudolph V. Powell, St. Louis, was one of 24 physicians elected to membership in the American College of Physicians on February 6 during the annual clinical session in Montreal.

The 76th Annual Session of the MSMA will convene in Kansas City on May 1-4. Eminent men who have contributed much to the advancement of medical science in their respective fields will be guests of the Association. They are Dr. Charles A. Elliott, Chicago, professor of medicine at Northwestern University School of Medicine; Dr. Arnold S. Jackson, Madison, Wis.; Dr. Peter C. Kronfeld, Chicago, associate professor of ophthalmology at the Graduate School of Medicine, Division of the Biological Sciences, University of Chicago; and Dr. J. Gordon Wilson, Chicago, professor of otology and laryngology at Northwestern University School of Medicine.

The April clinic of the Kansas City Southwest Clinical Society will be held on April 11 at St. Joseph's Hospital in Kansas City. The morning program will consist of presentations of case reports of colon disease. The distinguished guest will be Dr. Joseph W. Larimore, St. Louis, assistant professor of clinical medicine, Washington University School of Medicine.

TWENTY-FIVE YEARS AGO

The National Health Service Act in Great Britain is scheduled to become effective on July 5. On February 28, the *Journal of the American Medical Association* carried the following editorial concerning the situation:

"The British Medical Association opposes the National Health Service Act as the first and irrevocable step toward a whole time state medical service. In Great Britain, as in this country, the national medical care plan is offered as a health service instead of what it actually is—a system which would eventually bring every physician into government employment. The *British Medical Journal* has inspired British physicians to stand firm in their opposition to such enslavement."

The top leaders in county society memberships in the Missouri State Medical Association for 1947 are St. Louis Medical Society, 1,275; Jackson County, 634; St. Louis County, 243; Greene County, 112; Buchanan County, 103; Jasper County, 65; Boone County, 47; Ozark Medical Society (Barry, Christian, Lawrence, Stone, Taney), 42.

Garrett Pipkin, M.D., Kansas City, received a certificate of merit at the meeting of the American Academy of Orthopedic Surgery held on January 21-27 in Chicago.

The South Central Counties Medical Society met for dinner on February 20 at the Antlers Cafe in Mountain Grove with the following members and visitors present: Drs. J. R. Mott, Hartville; J. A. Fuson, Mansfield; L. T. Van Noy, Norwood; R. W. Denney, H. G. Frame and A. C. Ames, Mountain Grove; Garrett Hogg, Jr., Cabool; T. J. Burns, Houston; Leslie Randall, Licking; C. F. Callihan, Willow Springs; E. C. Bohrer and Rollin H. Smith, West Plains; and Guy D. Callaway and G. S. Pierce, Springfield.

TEN YEARS AGO

Federico Adler, M.D., Kansas City, has become a member of Jackson County Medical Society. Dr. Adler is a native of Austria, received his preliminary education at Colegio, Mejia, Quito, Ecuador, and his M.D. degree at Central Universidad, Quito, in 1954.

At a recent meeting, Rollin H. Smith, M.D., West Plains, was elected chief-of-staff of the medical board of the West Plains Memorial Hospital. Jack Wiles, M.D., was elected secretary.

The staff of Sisters Hospital in St. Joseph recently elected Dr. John L. Mothershead as President and Dr. Irwin Rosenthal as Secretary-Treasurer.

At a recent meeting of the American College of Radiology, Dr. Kenneth C. Hollweg, Kansas City, was one of 60 radiologists to be a Fellow of the organization.

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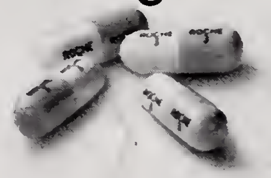

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116th MSMA Annual Session
April 4-7, 1974 Kansas City

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What should a medication for sleep be expected to provide?

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psycholog
dependence have not been reported o
recommended doses, use caution in ad
ministering to addiction-prone individ
or those who might increase dosage.

Precautions: In elderly and debilitated
initial dosage should be limited to 15 m
to preclude oversedation, dizziness an
or ataxia. If combined with other drugs
having hypnotic or CNS-depressant
effects, consider potential additive effe
Employ usual precautions in patients
who are severely depressed, or with

Sleep for 7 to 8 hours without need to repeat dosage during the night

No sleep medication has been as rigorously evaluated in the sleep research laboratory as Dalmane. Insomnia patients given one 30-mg capsule of Dalmane at bedtime, on average: fell asleep within 17 minutes, had fewer nighttime awakenings, spent less time awake after sleep onset, and slept for 7 to 8 hours with no need to repeat dosage during the night.

Sleep with consistency

Dalmane (flurazepam HCl) has been shown to be consistently effective even during consecutive nights of administration. Thus there is little likelihood for the need to increase dosage to maintain therapeutic effect.

Dalmane is in a class by itself. Not a narcotic, barbiturate or methaqualone, Dalmane is the only available benzodiazepine specifically indicated for insomnia.

Sleep with relative safety

Chronic tolerance studies have confirmed the relative safety of Dalmane (flurazepam HCl); no depression of cardiac or respiratory function was noted in patients administered recommended or higher doses for as long as 90 consecutive nights. In most instances when adverse reactions were reported they were mild, infrequent and seldom required discontinuance of therapy. Morning "hang-over" with Dalmane has been relatively infrequent. Dizziness, drowsiness, lightheadedness and the like have been the side effects noted most frequently, particularly in the elderly and debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

When your evaluation of insomnia indicates the need for a sleep medication, consider Dalmane—a single entity agent proved effective and relatively safe for relief of insomnia.

DALMANE®
(flurazepam HCl)
When restful sleep is indicated

One 30-mg capsule *h.s.*—usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*—initial dosage for elderly or debilitated patients.

ROCHE

ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

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depression or suicidal tendencies. ic blood counts and liver and kid- nction tests are advised during ed therapy. Observe usual precau- n presence of impaired renal or c function.

se Reactions: Dizziness, drowsi- ightheadedness, staggering, ataxia ling have occurred, particularly rly or debilitated patients. Severe on, lethargy, disorientation and probably indicative of drug intoler- r overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

Opinion & Dialogue

"Prescription drugs – who should determine the maker?"

Dispenser of Medicine

Clifton J. Latiolais
President
American
Pharmaceutical
Association

"Too many doctors are ind
ent to the economic consequenc
their decisions." So stated a rec
issue of *Medical News Report* (D
cember 4, 1972), an independe
weekly newsletter published by f
AMA Chief Executive F. J. L. Bla
game, M.D.

Doctor, are you indifferent...?

In discussing an anticipate
crease in Blue Shield rates, Dr.
ingame's newsletter had this to

"In general, it can be said,
have given the impression they
not particularly concerned with
increase in cost of health care t
patients...

"True, an MD's training is
marily scientific, but in the real
of practice, all of his scientific d
sions have a price tag, or an eco
impact. The economics of healt
beckon the practitioner's attent
Concern for economics of medi

Maker of Medicine

C. Joseph Stetler
President
Pharmaceutical
Manufacturers
Association

When the pharmacist reco-
mends that a drug product othe
the one ordered be dispensed, t
prescriber invariably permits th
change when he feels the best i
ests of the patient will be serve

Shortcomings of Pro-Substitutio Argument

The fact remains that it is
sary for the prescriber to know t
the change is being contemplat
and to be in a position to conser
demur. Without that opportunit
unilateral decision of the pharm
made in the absence of clinical
edge of the patient, could expos
to needless risks, and in additio
jeopardize the relationship betv
the professions of Pharmacy an
Medicine. In my view, there is n
in the pro-substitution argumen
offsets these risks.

The Issue of Drug Knowledge

Substitution advocates cla
that the primary justification fo
changing the rules is the desire
better utilize pharmacists' know
about drugs. Yet the pharmacis
task to keep current on the enti
field of drug therapy, to some d
puts him at a disadvantage. Mo
often, a practicing physician wi
expert knowledge of no more th

Advertisement

d be an obligation of medical ce...

'Medical societies ought to con- ontinuing campaigns to point e substantial savings that could lized thru deductible insurance rotection for catastrophic ill- At the very least, they should, in tients' interest, question the s of any insurance organization aises health care costs by forc- licyholders to buy insurance nay not need or want and prob- von't ever use.

"Too many doctors are indiffer- the economic consequences of decisions. Too many, for ex- , habitually hospitalize patients e convenience of the MD. It's ense to deny such habits exist...

"Doctors, thru their medical so- s, have unhesitatingly appealed ir patients for support in the against government interference he private practice of medicine. he public in the past has re- ded. It's time the American Med- ssociation and state and local cal societies paid off the debt by ive action to hold down the cost dical care."

of Drugs

Insurance rates and hospital ges are only two factors in health care costs. The cost of drugs—both prescription and nonprescription—is another.

And when it comes to drug costs, the nation's pharmacists *are concerned*. Through their national professional society, the American Pharmaceutical Association, pharmacists are advising the public to use nonprescription medication cautiously and conservatively, and to seek the advice of their pharmacist before selecting or purchasing such drugs.

Outdated Laws

The pharmacist also is aware that when it comes to prescription drugs, often he has an even greater opportunity to reduce the cost to the patient—with no sacrifice in the quality of the medication dispensed. But in many states, outdated and antiquated laws prevent the pharmacist from engaging in drug product selection. "Drug product selection" simply means that the pharmacist functions in the patient's interest by consciously choosing, from the multiple brands available, a low-cost quality brand of the specific drug to be dispensed in response to the physician's prescription order.

Much *misinformation* has been purposely spread by those who stand to gain financially by maintaining high drug costs to the public. An endless stream of propaganda has emanated from the drug industry in an effort to persuade the medical profession that these so-called anti-substitution laws should be retained. And as long as these laws are retained, the drug industry will continue its current marketing practices which contribute unnecessarily to high drug costs to patients. These practices also are inviting government agencies to expand their restrictive controls on physicians and pharmacists.

APhA Efforts

As pharmacists, we are concerned about health care costs. We hope that every physician shares our concern on this vital issue, and will give his personal support to the constructive efforts APhA has undertaken in the interest of all patients.

(For a complete discussion of drug product selection, you are invited to request a free copy of the "White Paper on the Pharmacist's Role in Product Selection" from: American Pharmaceutical Association, 2215 Constitution Avenue, N.W., Washington, D.C. 20037.)

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drugs that he selects to treat the rity of conditions encountered in ractice. Moreover, the physi- 's choice of a specific brand is d on his knowledge of the pa- 's medical history and current ition, and his experiences with articular manufacturer's luct.

Some substitution proponents argued that the dispensing of a cription is a simple two-party saction between the pharmacist the patient, and that a substitut- harmacist may avoid even a nical breach of contract by simply fying the patient that he is making substitution. I would judge that courts would be sympathetic ard a pharmacist who substituted out physician approval and who ertook a legal defense that seeks ake the patient responsible for pharmacist's actions.

uced Prescription Prices?

Substitution advocates are gesting to the consumer, and par- larly the consumer activist, that uced prescription prices could w legalization of substitution. have seen absolutely no evidence stify this claim. To the contrary, erience in Alberta, Canada, where stitution is authorized, suggests the opposite.

Many pharmacists understandably are concerned about the cost of maintaining multiple stocks of similar products. While there is no doubt that inventory costs rise when additional brands are stocked, it would be interesting to know how much they rise, and how many pharmacists actually stock *all* brands—of, say, ampicillin or tetracycline—or how long they keep "slow moving" products on their shelves before they are returned for credit. To ask that the industry eliminate multiple sources is to ask competitors to stop competing.

Drug Substitution—A License for the Unethical

Anti-substitution repeal would favor "corner cutting" pharmacists and manufacturers. For them, free substitution would be not a right, but a license. As an aftermath, it is quite likely that the confidence of both physicians and patients in the profession of Pharmacy would be eroded, as revelations about the unconscionable behavior of an undisciplined few were magnified in the press or in professional circles.

Summary

In short, what the American Pharmaceutical Association advocates as a broad-spectrum panacea looks to us to be not only a minority view (advocacy of substitution is by no means a uniform policy in Pharmacy), but also an extraordinarily costly and ineffective remedy, whose side effects are odious. We believe (1) that an impressive majority of pharmacists prefer to work with Medicine and with industry, for the consumer, and for the general good, (2) that they seek the privilege to substitute when the patient might gain and when the patient's doctor agrees, and (3) that they seek to work for the resolution of genuine grievances openly and professionally.

(For amplification of PMA views, please write for our booklet, "The Medications Physicians Prescribe: Who Shall Determine the Source?" It is available from: Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.)

Pharmaceutical
Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

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Codeine usually provides
the relief needed.

HERE Biliary calculi

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that it requires morphine is
beyond the scope of
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Ⓒ III **prescribing convenience:** up to 5 refills in 6 months, at your discretion (unless restricted by state law); by telephone order in many states.

Empirin Compound with Codeine **No. 3**, codeine phosphate* 32.4 mg. (gr. ½); **No. 4,** codeine phosphate* 64.8 mg. (gr. 1). *Warning—may be habit-forming. Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.

Wellcome
Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

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HERE
Osteoarthritis

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#3, codeine phosphate* (32.4 mg.) gr. ½
#4, codeine phosphate* (64.8 mg.) gr 1

MSMA

NEWS

ROUND - UP

MAY, 1973

Summary of House actions

udent delegates seated at Session

ight medical students took seats as delegates full voting rights during the 115th Annual sion of the Missouri State Medical Association, rch 29 — April 1, in St. Louis.

long with voting to seat student delegates, the ise approved By-Law changes affecting the nner in which Resolutions are introduced and ignating the Speaker and Vice-Speaker as delees-at-large.

However, the House declined to take a definite ition on physicians' guilds, Professional Standls Review Organizations and abortions.

The MSMA became the seventh state in the U.S. seat medical students with its action at the sion. The students, two from each of Missouri's r medical schools, are to be certified by the n of the school. The first students voting in the MA House were: University of Missouri-Conbia, Arlin Lockard and John Brandt; University Missouri-Kansas City, Ms. Pat Hubble and rlin Brown; St. Louis University, R. M. Rutkow d John P. Jones; Washington University, James rton and Barry Farber.

The By-Law change concerning Resolutions uires that Resolutions must be received at the sociation office 45 days prior to the opening sion of the House for publication in the Handok. Resolutions to be introduced after that time ist be made available to the House 24 hours fore the session in which it will be introduced d 200 copies, or funding for such, must be supied by the sponsor.

The Speaker and Vice-Speaker were made legates-at-large because under previous Byaws it would have been possible that the two ficers would not have been elected as Delegates their local societies.

Discussion of a recommendation that the MSMA prove the formation of the Missouri Physicians' uild was one of the dominating features of the ssion.

The Commission on Medical Economics, Third arty Medicine and Governmental Relations and Ad Hoc Committee on Negotiation of Profesonal Fees both submitted reports recommending pproval of the Guild.

Robert E. Bregant, M.D.
Fifth District Councilor

E. A. Stricker, M.D.
President of MSMA

Members of these two groups were requested by the House of Delegates and the MSMA Council in prior Sessions to investigate a mechanism for negotiation of professional fees and regulations and procedures that establish the conditions under which physicians render their services. The Ad Hoc Committee and the Commission concluded that it is not legally possible for the MSMA to be a mechanism for bargining of fees and working conditions and, therefore, recommended the establishment of a separate Guild.

(Please see next page)

House supports emergency services, RMP, Medicre

(Continued from page 1)

Following hearings at the Annual Session, the Reference Committee on Resolutions recommended to the House that the Guild was not the most desirable mechanism at this time for dealing with the socio-economic problems of medicine today. The Reference Committee felt that a more aggressive approach through the AMA is needed.

After lengthy debate, the matter was tabled.

A resolution which called for local control over PSROs was tabled for further study and the House directed the MSMA to follow developments of court suits in Oklahoma and Indiana which challenge the PSRO concept.

Three Resolutions which expressed opposition to the U.S. Supreme Court's recent decision on abortions were also tabled. Similarly, a Resolution on "Definition of Beginning of Life" was tabled.

A Constitutional Amendment concerning the methods of referendums was passed by the House and will lay on the table until the 1974 Annual Session. The Amendment reads: "Petition signed by 10 percent of the active members of the Association, including petitioners representing at least one-half of the component medical societies, will initiate a referendum regarding changes in the Constitution or By-Laws, or questions before the House of Delegates. A two-thirds vote of all active members of the Association responding will determine the question."

The House also adopted two Council recommendations. The first gave MSMA endorsement to the Health Care Foundation of Missouri in its efforts to become the responsible agency for PSRO activities in Missouri. The second stated that, as a general rule, the MSMA opposes the granting of a license to practice medicine to any physician who has been convicted of a felony.

The official minutes of the Annual Session will be published in the July issue of MISSOURI MEDICINE. A summary of action taken on several Resolutions included:

ADOPTED

EMERGENCY MEDICAL SERVICES — A MSMA Ad Hoc Committee will be named to work with other interested groups to prepare a detailed description of all aspects of a statewide Emergency Medical Service System. The plan should serve as a guide for a grant application for launching a system as has been done in Illinois and other states.

"MEDICREDIT LEGISLATION" — The MSMA endorses U.S. Senate Bill 444 and House Bill 2222 (Medicredit), as proposed by the AMA. AMA Trustees and Missouri Senators and Congressmen were informed of the endorsement.

INSURANCE FOR NEWBORN — Urges passage of legislation that provides for the right to health and hospital coverage from the moment of birth. Also states that any health insurance policy issued in the state shall provide such coverage whether issued to an individual or a group.

INSURANCE CLAIMS FORMS — Encourages physicians to charge insurance carriers for completion of insurance forms which are not Health Insurance Council approved. The physician shoul also feel free to charge for obtaining a duplica copy unless the form provides for a duplicate for the additional service of filing more than or insurance claim form. Asks HIC to design an implement, after approval by MSMA, a simplifie form.

MIDWIFERY — Authorizes appointment of committee to study midwifery and determine Missouri has a need for such services.

MMPAC — Authorizes the MSMA Council designate funds for use by the Missouri Medic Political Action Committee board to aid in pr motion of educational processes. None of the funds is to be used for candidate or politic party support.

REGIONAL MEDICAL PROGRAMS — Deplor exclusion of RMP from Administration's 19 budget and requests Congress to extend RMP le islation and funding. Missouri Congressional de gation was informed of action.

ST. LOUIS BLUE SHIELD — Opposes enactme of all legislation affecting St. Louis Blue Shie now pending in the Missouri General Assemb and instructs MSMA officers to inform Legislat of opposition. Other Blues Plans in state request not to be included in the Resolution.

NOT ADOPTED

LEGISLATED MEDICAL CARE — Would ha formed committee to study ways to deal wi trend of legislated medical care. (This is n handled by Ad Hoc Committee on Negotiation Professional Fees.)

IMMUNIZATION — Would have required rube vaccination before issuance of a marriage licen unless the female was pregnant.

REVISION OF FEDERAL NARCOTICS LAW Would have allowed legal dispensing of narcot to drug addicts in effort to eliminate necessity addits to commit crimes to maintain habit.

CONTROLLED SUBSTANCE LAW — Would sought repeal of Missouri Controlled Substan Law.

CONTINUED MEDICAL EDUCATION — Wo d have recommended that the Missouri Board f Healing Arts require 150 hours of continued me cal education every three years as prerequisite continued licensure.

ALLERGY RESIDENCY TRAINING — Wou have had MSMA not approve the residency traini program as prescribed by the AMA Council Medical Education until all fields of allergy represented.

NURSING HOME VISITS — Would have petiti Legislature to revoke present requirements monthly visitation by physician to all residents f nursing homes and simply require nursing ho e supervisors to consult with physicians as deem medically necessary.

OFFICE LIMITATION — Would have limi d MSMA Councilors and AMA Delegates from M souri to not more than three terms of two ye s each.

President-Elect James C. Cope, M.D. **Treasurer Donald Judd, M.D.**

w officers of MSMA elected to posts for 1973-74

James C. Cope, M.D., a Columbia urologist, s unanimously selected President-Elect of the ssouri State Medical Association at the Annual ssion, March 29-April 1, 1973, in St. Louis.

Dr. Cope is Past Chairman of the MSMA Council d has served as Councilor from the Fifth Dis- t since 1965. He is a former President of the one County Medical Society.

Dr. Cope succeeds E. A. Stricker, M.D., of James, who took over the reigns as President the MSMA from Walter T. Gunn, M.D., of St. uis, at the Session.

Six new MSMA officers were elected during e Convention. They are Donald Judd, M.D., St. uis, Treasurer; Robert A. Slickman, M.D., nsas City, Speaker; James T. Brown, M.D., ringfield, Vice-Speaker; Rae W. Froelich, M.D., banon, Vice-President; R. Lee Cooper, M.D., arrensburg, Vice-President; and Robert W. lley, M.D., St. Louis, Vice-President. John I. atthews, M.D., Jefferson City, was re-elected cretary.

Five Councilors were re-elected and Robert E. egant, M.D., Jefferson City, was elected to suc- d Dr. Cope as Fifth District Councilor. Those elected are Lysle M. Bach, M.D., Hannibal, cond District; Louis P. Hetlage, M.D., Troy, urth District; William D. Bradshaw, M.D., inton, Sixth District; Howard J. McAlhany, M.D., ringfield, Eighth District; and Eugene T. Hans- ough, M.D., Poplar Bluff, Tenth District.

Hector W. Benoit, Jr., M.D., Kansas City, and bert A. Ritter, M.D., St. Louis were elected legates to the AMA and Hugh E. Stephenson, ., M.D., Columbia, and Lawrence W. O'Neal, D., St. Louis, were elected as Alternates. Drs. tter and O'Neal will begin their terms Jan. 1, 74.

Completing the MSMA delegation to the AMA are Stanley S. Peterson, M.D., Springfield, and J. Loren Washburn, M.D., Versailles, Delegates; and James C. Sisk, M.D., Clayton, and Rae W. Froelich, M.D., Lebanon, Alternates.

In the organization session of the MSMA Council held immediately following the third meeting of the House of Delegates, R. Allen Chandler, M.D., Kansas City, was elected Chairman and Max S. Franklin, M.D., St. Louis, was elected Vice-Chairman.

R. Allen Chandler, M.D.
Chairman

Max S. Franklin, M.D.
Vice-Chairman

House of Delegates honors Dr. Neal, Mrs. Thomas

While there was plenty of discussion and several close votes on issues at the Annual Session, three Resolutions were passed with unanimous consent.

Dr. N. Pinson Neal, Emeritus Professor of Pathology at the University of Missouri-Columbia, due to an injured hip, was unable to attend the 115th Annual Session. It was the first Annual Session in over 50 years that Dr. Neal had not attended. A Resolution expressing wishes for a speedy recovery was adopted by acclamation.

It was also noted that Dr. Neal's son, Dr. M. Pinson Neal, Jr., had recently been named Provost of the University of Virginia Commonwealth and congratulations were included in the Resolution.

A Resolution expressing the appreciation of the Missouri State Medical Association to Mrs. Bertha A. (Bert) Thomas, who had been employed in the Association Headquarters for 30 years, was also unanimously adopted.

Mrs. Thomas retired effective April 1, 1973. The Resolution commended her for her service to the doctors of Missouri and extended the best wishes of the profession for health and happiness in the years to come.

Also passed unanimously was a Resolution urging the Postmaster General of the U.S. to issue a commemorative postage stamp honoring William Beaumont, M.D., on the 75th anniversary of the Publication of the Journal of Physiology. Dr. Beaumont is hailed as the first great American physiologist for his pioneering experiments in the physiology of digestion.

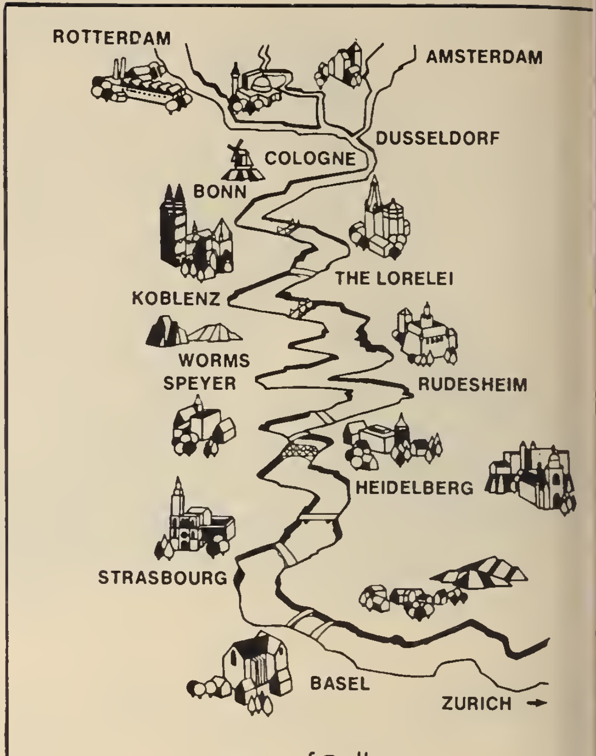
Press award winners named

Two newspaper reporters and a television station were winners in the Second Annual MSMA Medical Journalism Competition. The winners were presented plaques and checks for $150 at the Annual Session by outgoing President Walter T. Gunn, M.D.

Charles J. Oswald, reporter for the St. Louis Globe-Democrat, won the Medical News Reporting category with a series of stories on conditions at Homer G. Phillips Hospital in St. Louis.

John R. Stanard, reporter for the Poplar Bluff Daily American Republic, placed first in the Medical News Feature division with a four-part series on heart attacks.

WDAF-TV of Kansas City captured the Television News Award for an indepth report on the University of Missouri-Kansas City Medical School. Jim Pritchett was the writer and producer of the program.



Route of Fall tour

Medical seminar offered during 'Rhine Escape'

A medical seminar will be offered in conjur tion with the Missouri State Medical Associatior "Rhine Escape," scheduled this Fall.

The seminar will be conducted by the MSM in cooperation with the University of Heidelbe and the Tiefenauspital Der Stadt Bern of Bas Switzerland.

The 11-day "Rhine Escape" is highlighted a five-day cruise through Holland, Germar France and Switzerland. The tour departs Louis on October 7 and returns October 17 for inclusive cost of $569.

Trip features include:

- *Round trip air transportation via charter jet.*
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- *Continental breakfast while in hotels.*
- *All meals aboard ship.*
- *Complete optional sightseeing program.*

For additional information, write to Misso State Medical Association, Rhine Escape, P. Box 1028, Jefferson City, Missouri 65101.

Physicians win clock-radios

Four physicians were winners in the Regist tion Drawing at the Annual Session in St. Loui

Taking home Westinghouse AM-FM Digi Clock-Radios were Drs. Warren C. Baker, vannah; James W. Crain, Branson; Joseph Werth, Jefferson City; and George H. Wo, Carthage.

MISSOURI STATE MEDICAL ASSOCIATION

113 Madison St., P. O. Box 1028, Jefferson City, Mo. 65101
Telephone: AC 314-636-5151

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Illustrations should be glossy prints or drawings in India ink on white paper. They should not be mounted and name of author and figure number should be penciled lightly on the backs. Legends should appear on a separate sheet. Colored illustrations will be used when suitable if author assumes the actual cost.

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All material other than scientific should be received prior to the first of the month preceding month of publication.

Please give notice of change of address at least one month in advance of the change, giving old and new addresses.

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Physician Manpower for Missouri: 1971

HERBERT R. DOMKE, M.D., Dr. P.H., Director

and

BARBARA HOSKINS, Systems Analyst

Missouri Division of Health

This report provides answers for four of the most frequently asked questions concerning Missouri's physicians:

1. How many doctors does Missouri have?
2. How many are in active practice?
3. Where are they located?
4. What are their specialties or type of practice?

We believe that this report contains the best available information for answering these questions for Missouri in 1971.

Does Missouri have enough doctors? This is, perhaps, the most important question, but it cannot be completely answered by the information in this report. Certainly, it is clear that there are great differences in areas within the state in the number of physicians available. There is no doctor, for example, in De Kalb County, which lies just northeast of St. Joseph. On the other hand, nearly half of the approximately 5,000 practicing physicians in Missouri are in the four counties and one city in the Missouri portion of the St. Louis metropolitan region. There are more than 12 physicians for every 10,000 population in the St. Louis area, but there are approximately only four physicians for each 10,000 persons living in the seven counties making up the South Central Ozark region of Missouri.

Newspaper and magazine articles, public officials and private citizens speak of the "crisis" in health care and frequently refer to a "doctor shortage." Among the many federal programs designed to improve the American health care system is the new (1972) program to provide funds for schools of medicine and osteopathy to increase the number of students. Under another program, financial incentives are provided for physicians and some other health personnel to encourage them to practice in shortage areas. Yet another new program, the National Health Service Corps, places physicians and other health personnel in areas of need. Many other federal programs attempt to provide health service where they either do not exist or are inadequate.

In the discussions about health programs however, while most people say there is an absolute shortage and claim that 50,000 additiona physicians are needed nationwide to meet immediate needs, others disagree and maintai that the problem is one of maldistribution Some contend that even if 50,000 physician could be added immediately, there still woul be the same shortages in the inner cities an rural areas.

Another important aspect of the problem i that of specialty practice; neurosurgeons an general practitioners are not interchangeabl Some are questioning whether or not the distribution of physicians within specialties is optimal; one recent editorial in the *Journal of th American Medical Association* suggests that residency programs are training too many genera surgeons.[1] It is pertinent to note also that th American Medical Association reports that as o September, 1970, the percentage of filled hospital residency programs ranged from a low o 48% for family practice to a high of 98% fo ophthalmology.[2]

There is no agreement in the United States today as to what optimum distribution by specialty is just as there is no agreement on how man doctors are needed to provide "adequate" care Also, of course, the number of physicians i only one aspect of health care availability. Factors of transportation, educational and economic backgrounds of the population to be serve affect both the demand for and use of healt personnel.

Certainly, the above questions are applicabl to Missouri. This report provides statistical information which relates to these general questions, but it cannot finally answer them. W know, however, that this report does provide detailed information of a kind currently neede by many agencies and interested individuals. Fo ample, the Division of Health has been asked identify counties which have a "shortage" of hysicians for the Health Professions Student oan Program administered by the National Initutes of Health. The legislation establishing at program provides that a county has a shortge of physicians if its ratio of physicians to opulation is less than 1:1,500. The State Comrehensive Health Planning agency has been ked by the Health Service and Mental Health dministration to identify "health service scarty areas" for use in several programs. Alough arbitrary ratios are not to be used in the lentification process, the agency is requested to dicate the number and type of health reources in the area. Thus, even within the fedal government, there is no single guideline for hat constitutes a "shortage" or "scarcity" of ealth resources.

The State Board of Health and the Goveror's Advisory Council for Comprehensive ealth Planning recognized these needs for reable information and gave priority to this tudy of physicians as the first project of the issouri Center for Health Statistics. Thus, this roject is the first new major data collection and nalysis effort of the Center. The Missouri Ciner for Health Statistics was established to proide improved health statistics to meet the rapidy increasing demands for accurate statistical ata by governmental and voluntary health gencies, professional associations and the comnunity comprehensive health agencies now beng developed in most areas of the state.

The Center is jointly sponsored by the State oard of Health and the Governor's Advisory ouncil for Comprehensive Health Planning. The origin, early development and general polcies of the Center are described in "Missouri enter for Health Statistics: The First Year, 1970-1971." This document is available on request from the Missouri Division of Health, Broadway State Office Building, Jefferson City, Mo. 65101.

Future questionnaires and reports are planned. We will appreciate comments and criticism concerning this report and the data contained in it. We especially would like to know what kind of data would be most helpful to others.

MISSOURI PHYSICIANS: THE BACKGROUND

The data for this study are derived from the State Board of Registration for the Healing Arts. There were nearly 14,000 physicians registered to practice in Missouri in July, 1971, as shown in Table 1. This does not mean that Missouri has 14,000 doctors, because many physicians maintain licensure in Missouri but do not practice in Missouri. (Both licensure and annual registration are required for a physician to practice medicine legally in Missouri. The terms are used interchangeably in this report to refer to physicians who meet both conditions.)

This study represents the first new major data collection and analysis effort of the Missouri Center for Health Statistics, which is jointly sponsored by the State Board of Health and the Governor's Advisory Council for Comprehensive Health Planning.

The content and conclusions of this report have been reviewed and approved by the Physician Manpower Committee of the Missouri Center for Health Statistics Task Force. The members of the Physician Manpower Committee are the following:

Edward W. Hassinger, Ph.D.
Raymond R. McIntyre
Edward Borman, Jr.
John A. Hailey
Edward Cross, M.D.
George E. Gantner, Jr., M.D.
H. Denny Donnell, Jr., M.D.
Willis W. Marshall, Jr.

O. F. Anderhalter, Ph.D., was Chairman of the Physician Manpower Committee, but press of other business required his resignation from the Committee. Special thanks are due him for his contribution in the formative stages of development of the Physician Manpower Study reported here. The authors also wish to express special appreciation to Willis W. Marshall, Jr., who directed the assembly of data for this study.

Reprints of this report may be obtained from the Missouri Division of Health, Broadway State Office Bldg., Jefferson City, Mo. 65101.

In July of 1971, 7,553 or well over half of the 13,987 physicians licensed by the State Board of Registration for the Healing Arts were located in other states. Of the 6,434 licensed physicians residing or practicing in Missouri, 721 were still in training. (There are additional numbers of physicians in training who either are not licensed or who function with temporary licenses.) Also licensed were 471 physicians who reported that they are retired or partially

TABLE 1

NUMBER OF PHYSICIANS REGISTERED TO PRACTICE IN MISSOURI—JULY, 1971

All Physicians (M.D. and D.O.)

Location	*Active*	*In Training*	*Retired*	*Total*
Missouri	5,242	721	471	6,434
Non-Missouri	6,348	956	249	7,553
Total Registered	11,590	1,677	720	13,987

retired. And, of course, many retired physicians have discontinued the annual registration process and have allowed their licenses to lapse. After these exclusions, there were 5,242 licensed physicians *in active practice;* a rate of 11.0 practicing physicians for each 10,000 population.

As mentioned above, many physicians in training hold only temporary licenses. According to the Missouri licensing laws, a physician may be issued a temporary license, but he then can practice only in "state maintained hospitals or other hospitals approved by the Board [of Registration for the Healing Arts] under the supervision of the superintendent or chief-of-staff of such institution."[3] Interpretation of the law has held that these physicians are not licensed practitioners in Missouri.

This report focuses on fully licensed physicians in active practice, and it excludes certain physician groups included in national physician manpower reports. Both the American Medical Association and the American Osteopathic Association include physicians in training and retired physicians, whether or not they are currently licensed to practice medicine. State and local community physician services are more accurately seen when fully licensed physicians in active practice are considered, but it is a disadvantage that a direct comparison with other reports cannot be made.

Two fairly recent Missouri physician manpower studies are those by Hassinger and Hobbs,[4] published in 1967, and Olson,[5] published in 1968. Both are based on American Medical Association and American Osteopathic Association data. These reports have shown Missouri's ratio of physicians to population to be slightly higher than that for the United States as a whole.

Hassinger and Hobbs used the 1965 American Medical Association directory and the 1966 American Osteopathic Association directory for their study of Missouri physicians. They reported 12.0 M.D.'s per 10,000 population for Missouri. This was nearly 10% below the 13.2 rate for the United States. In their study, they also noted that "the osteopath/population ratio is higher in Missouri than in any other state." The rate for all physicians in Missouri (M.D. and D.O. combined) was found to be 14.5 per 10,000 population. They noted in their report that this was the highest rate for physicians in the 12-state North Central region.

Olson found a similar relationship between the Missouri and United States rates. His information on medical doctors was from computer tapes maintained by the American Medical Association and current to December, 1966. The 1967 American Osteopathic Association directory was used for compiling information on osteopathic physicians. He found a total rate of 14.9 physicians per 10,000 population for Missouri compared to 14.5 for the United States.

The exclusion from this report of almost 1,200 licensed physicians who are in training or retired and the exclusion of the unknown number who have let their licenses lapse or hold temporary licenses obviously means that a lower ratio of physicians to population will be found in this report compared to reports based on American Medical Association and American Osteopathic Association sources which do not exclude them. The report by Hassinger and Hobbs shows a Missouri rate of 14.5 physicians per 10,000 population and Olson's report shows 14.9 compared to the 11.0 reported here. Does this mean that Missouri's physician situation has worsened? We believe not. Best evidence indicates that ratios of physicians to population are relatively stable and that changes occur slowly.

It also should be noted that United States citizenship was required for Missouri licensure until 1970. In that year, the State Attorney General ruled the citizenship requirement unconstitutional. According to the State Board of Registration for the Healing Arts, Missouri has since licensed 502 graduates of foreign medica schools. Although it has been estimated by the State Board that at least half of the foreign physicians obtaining Missouri licenses have no remained in the state to practice, the legal deterrent to a foreign physician establishing a medical practice in Missouri has been removed.

In the judgment of the authors and the Physician Manpower Committee, it seems safe to assume that (1) Missouri's rate of practicing physicians to population has not changed significantly since these previous studies and (2) that

As a general conclusion, Missouri's ratio of physicians to population is approximately the same as that for the United States.

DISTRIBUTION OF PHYSICIANS WITHIN MISSOURI

All studies of physician manpower distribution in the United States have agreed that physician services are less available in rural areas and urban ghettos. The past several decades also have seen an increase in the number of physicians on faculties of medical and osteopathic schools. These findings from other studies indicate that the number of physicians in relation to population in Missouri would be expected to be higher in urban areas than in rural, and it also would be expected that areas with training centers would have more physicians per population than comparable urban or rural areas without medical or osteopathic schools.

Table 2 shows the total number of registered physicians for counties grouped by Regional Planning Commission Areas (Fig. 1). The geographical distribution of physicians in this report focuses on these areas. Counties have been assigned into Regional Planning Commission areas by the Governor in accord with state legislation and federal guidelines. For purposes of this report, the regional groupings show the important relationships regarding physician distribution in a generally uniform and consistent pattern. As well, they have the practical advantage of permitting comparison between 20 regions rather than 114 counties.

For this study, the primary office address of the physician was used. In a number of cases, of course, the physician may reside in one county and have his office in another county. In very few instances would this affect the location of the physician in terms of the region. No changes of consequence in the ratio of physicians to population would be effected by assignment of physicians to county of residence rather than to office address.

Urban and Teaching Centers

Of Missouri's 5,242 active physicians, 3,489 are located in the two major metropolitan portions of the state. The Missouri portion of the St. Louis metropolitan region, consisting of St. Louis, St. Charles, Jefferson and Franklin counties and the independent city of St. Louis, contains 2,345 physicians or 44.7% of all Missouri practicing physicians. On the western side of the state, the Missouri portion of the Kansas City metropolitan region contains 1,144 physicians (21.8% of actively practicing physicians). This region consists of Jackson, Clay, Platte, Ray and Cass counties.

The nine counties and one independent city of these Kansas City and St. Louis regions contain 57.9% of the state's population (and only 7.9% of its land area), yet they account for 66.6% of Missouri's physicians. The Lakes Country, Mid-Missouri and Mo-Kan Bi-State regions contain an additional 13.4% of Missouri's population and have 801 physicians or 15.3%. The regions of the state which include the Census Bureau-designated Standard Metropolitan Statistical Areas, therefore, have 81.8% of Missouri physicians for 71.3% of the state's population—a larger share of physicians in comparison to their population than do the nonmetropolitan regions. The figures for all regions are shown in Table 3.

The meaning in terms of availability of physicians to population between metropolitan and nonmetropolitan Missouri is more apparent when rates of physicians per 10,000 population are considered. The metropolitan rate is 12.7 physicians for each 10,000 population, but the more rural areas of the state have only 7.0. This means that residents of the metropolitan regions have more than one and one half times the number of physicians available to them in the same region in relationship to their population than do residents of nonmetropolitan regions.

The general pattern of metropolitan rates being higher than nonmetropolitan rates has two exceptions. The major exception is nonmetropolitan Northeast Missouri with the highest regional rate in the state (18.6). This high rate is due to the presence of Kirksville College of Osteopathic Medicine with a substantial number of faculty in the Northeast Missouri region. The other exception is the Ozark Gateway region. This region includes the large city of Joplin and has a rate of 9.5. This is similar to the other urban areas and is slightly in excess of the 9.2 rate for the Mo-Kan Bi-State (St. Joseph) region. With these two exceptions, metropolitan regions have substantially higher rates of physicians per population than do nonmetropolitan regions.

Rural Regions

The 13 remaining Regional Planning Commission areas are more rural and all have lower physician rates per population than any of the seven regions discussed above.

Patterns of physician distribution in these more rural regions show considerable differ-

TABLE 2

PHYSICIANS REGISTERED BY MISSOURI FOR COUNTIES WITHIN REGIONAL PLANNING COMMISSION AREAS WITH RATES PER 10,000 POPULATION—JULY, 1971

		Active			*In Training*			*Retired*			*Total Registered*			*Active Physicians Per 10,000*
Location	*Population*	M.D.	D.O.	TOTAL	M.D.	D.O.	TOTAL	M.D.	D.O.	TOTAL	M.D.	D.O.	TOTAL	*Population*
EAST-WEST GATEWAY COORDINATING COUNCIL (St. Louis)														
St. Louis County	985,459	927	105	1,032	248	14	262	74	10	84	1,249	129	1,378	10.5
St. Louis City	613,835	1,168	30	1,198	199	8	207	82	4	86	1,449	42	1,491	19.5
Jefferson	110,748	29	6	35	1	0	1	3	1	4	33	7	40	3.2
St. Charles	98,818	48	7	55	0	1	1	2	0	2	50	8	58	5.6
Franklin	56,594	20	5	25	0	0	0	2	1	3	22	6	28	4.4
Region Total	1,865,454	2,192	153	2,345	448	23	471	163	16	179	2,803	192	2,995	12.6
MID-AMERICA REGIONAL COUNCIL (Kansas City)														
Jackson	661,282	837	158	995	48	27	75	55	24	79	940	209	1,149	15.0
Clay	128,621	85	29	114	6	1	7	6	2	8	97	32	129	8.9
Cass	40,778	7	10	17	0	1	1	0	0	0	7	11	18	4.2
Platte	33,286	7	3	10	2	0	2	0	1	1	9	4	13	3.0
Ray	17,857	6	2	8	0	0	0	0	0	0	6	2	8	4.5
Region Total	881,824	942	202	1,144	56	29	85	61	27	88	1,059	258	1,317	13.0
LAKES COUNTRY (Springfield)														
Greene	156,694	215	16	231	5	0	5	15	6	21	235	22	257	14.7
Lawrence	24,845	12	4	16	1	0	1	1	0	1	14	4	18	6.4
Barry	19,764	6	6	12	0	0	0	1	0	1	7	6	13	6.1
Webster	15,829	2	3	5	0	1	1	0	0	0	2	4	6	3.2
Polk	15,665	4	4	8	0	0	0	3	1	4	7	5	12	5.1
Christian	15,507	2	4	6	0	0	0	0	0	0	2	4	6	3.9
Taney	13,413	8	2	10	0	0	0	4	3	7	12	5	17	7.5
Dallas	10,179	2	3	5	0	0	0	1	0	1	3	3	6	4.9
Stone	10,166	1	2	3	0	0	0	7	0	7	8	2	10	3.0
Dade	6,806	3	1	4	0	0	0	0	0	0	3	1	4	5.9
Region Total	288,868	255	45	300	6	1	7	32	10	42	293	56	349	10.4
MID-MISSOURI (Columbia)														
Boone	84,459	237	4	241	81	2	83	11	3	14	329	9	338	28.5
Cole	47,054	53	18	71	3	3	6	4	5	9	60	26	86	15.1
Callaway	26,292	19	11	30	4	2	6	0	2	2	23	15	38	11.4
Audrain	25,415	15	8	23	1	0	1	1	1	2	17	9	26	9.0

Cooper	14,735	8	3	11	1	0	1	1	2	3	10	5	15	7.5
Osage	11,056	0	4	4	0	0	0	0	0	0	0	4	4	3.6
Moniteau	10,815	3	3	6	0	0	0	0	0	0	3	3	6	5.5
Howard	10,581	5	1	6	0	0	0	0	0	0	5	1	6	5.7
Region Total	230,407	340	52	392	90	7	97	17	13	30	447	72	519	17.0
MO-KAN BI-STATE (St. Joseph)														
Buchanan	87,001	84	10	94	3	0	3	5	5	10	92	15	107	10.8
Clinton	12,623	3	7	10	0	0	0	2	2	4	5	9	14	7.9
Andrew	12,050	4	1	5	0	0	0	0	1	1	4	2	6	4.1
De Kalb	7,338	0	0	0	0	0	0	0	0	0	0	0	0	—
Region Total	119,012	91	18	109	3	0	3	7	8	15	101	26	127	9.2
NORTHWEST MISSOURI														
Nodaway	22,614	7	2	9	0	0	0	0	0	0	7	2	9	4.0
Atchison	9,292	4	0	4	0	0	0	0	1	1	4	1	5	4.3
Gentry	8,043	2	1	3	0	0	0	0	0	0	2	1	3	3.7
Holt	6,566	2	3	5	0	0	0	0	0	0	2	3	5	7.6
Worth	3,332	1	1	2	0	0	0	0	0	0	1	1	2	6.0
Region Total	49,847	16	7	23	0	0	0	0	1	1	16	8	24	4.6
GREEN HILLS														
Livingston	15,406	7	5	12	1	0	1	0	0	0	8	5	13	7.8
Linn	15,039	6	4	10	0	0	0	0	4	4	6	8	14	6.6
Grundy	11,826	4	1	5	2	0	2	0	0	0	6	1	7	4.2
Harrison	10,180	3	3	6	1	1	2	0	2	2	4	6	10	5.9
Daviess	8,367	3	3	6	0	0	0	0	0	0	3	3	6	7.2
Caldwell	8,354	3	2	5	1	0	1	0	1	1	4	3	7	6.0
Sullivan	7,509	1	2	3	0	0	0	0	0	0	1	2	3	4.0
Putnam	5,841	0	4	4	0	1	1	0	1	1	0	6	6	6.8
Mercer	4,857	0	3	3	0	0	0	0	0	0	0	3	3	6.2
Region Total	87,379	27	27	54	5	2	7	0	8	8	32	37	69	6.2
MISSOURI VALLEY														
Saline	24,928	17	2	19	2	0	2	1	1	2	20	3	23	7.6
Carroll	12,517	4	5	9	0	0	0	0	0	0	4	5	9	7.2
Chariton	10,980	2	5	7	0	0	0	0	0	0	2	5	7	6.4
Region Total	48,425	23	12	35	2	0	2	1	1	2	26	13	39	7.2
NORTHEAST MISSOURI														
Adair	22,852	2	70	72	0	14	14	2	9	11	4	93	97	31.5
Clark	8,264	0	2	2	0	0	0	0	0	0	0	2	2	2.4
Knox	5,639	2	4	6	0	0	0	0	1	1	2	5	7	10.6
Scotland	5,433	1	4	5	0	0	0	0	0	0	1	4	5	9.2
Schuyler	4,653	0	2	2	0	0	0	0	0	0	0	2	2	4.3
Region Total	46,841	5	82	87	0	14	14	2	10	12	7	106	113	18.6

TABLE 2 (*Continued*)

Location	*Population*	*Active* M.D.	*Active* D.O.	*Active* TOTAL	*In Training* M.D.	*In Training* D.O.	*In Training* TOTAL	*Retired* M.D.	*Retired* D.O.	*Retired* TOTAL	*Total Registered* M.D.	*Total Registered* D.O.	*Total Registered* TOTAL	*Active Physicians Per 10,000 Population*
MARK TWAIN														
Marion	28,131	24	3	27	0	0	0	4	0	4	28	3	31	9.6
Randolph	22,599	10	8	18	0	0	0	1	1	2	11	9	20	8.0
Pike	17,047	7	5	12	1	0	1	1	0	1	9	5	14	7.0
Macon	15,406	3	9	12	0	0	0	0	1	1	3	10	13	7.8
Lewis	11,043	0	4	4	0	0	0	1	1	2	1	5	6	3.6
Monroe	9,483	1	6	7	0	0	0	1	0	1	2	6	8	7.4
Shelby	7,849	1	5	6	0	0	0	1	0	1	2	5	7	7.6
Ralls	7,783	0	2	2	0	0	0	0	0	0	0	2	2	2.6
Region Total	119,341	46	42	88	1	0	1	9	3	12	56	45	101	7.4
BOONSLICK														
Lincoln	18,501	4	7	11	0	0	0	0	4	4	4	11	15	5.9
Montgomery	11,039	1	4	5	0	1	1	2	0	2	3	5	8	4.5
Warren	9,848	1	1	2	1	0	1	1	0	1	3	1	4	2.0
Region Total	39,388	6	12	18	1	1	2	3	4	7	10	17	27	4.6
OZARK GATEWAY														
Jasper	80,372	66	20	86	3	1	4	3	2	5	72	23	95	10.7
Newton	33,365	13	11	24	0	1	1	1	1	2	14	13	27	7.2
McDonald	12,488	1	6	7	0	0	0	1	0	1	2	6	8	5.6
Barton	10,420	10	3	13	0	0	0	0	0	0	10	3	13	12.5
Region Total	136,645	90	40	130	3	2	5	5	3	8	98	45	143	9.5
KAYSINGER BASIN														
Vernon	19,022	12	5	17	0	6	6	1	1	2	13	12	25	8.9
Henry	18,473	8	7	15	0	1	1	2	2	4	10	10	20	8.1
Bates	15,499	9	1	10	1	1	2	1	3	4	11	5	16	6.5
Benton	9,848	1	3	4	0	0	0	0	0	0	1	3	4	4.1
Cedar	9,497	3	1	4	0	0	0	1	2	3	4	3	7	4.2
St. Clair	7,647	5	0	5	0	0	0	1	1	2	6	1	7	6.5
Hickory	4,505	0	2	2	0	0	0	0	1	1	0	3	3	4.4
Region Total	84,491	38	19	57	1	8	9	6	10	16	45	37	82	6.7
SHOW-ME														
Johnson	34,907	14	5	19	0	0	0	1	0	1	15	5	20	5.4
Pettis	34,212	24	7	31	1	0	1	1	2	3	26	9	35	9.1
Lafayette	26,912	13	7	20	1	1	2	0	3	3	14	11	25	7.4
Region Total	96,031	51	19	70	2	1	3	2	5	7	55	25	80	7.3

SOUTH CENTRAL OZARK														
Howell	23,807	8	2	10	0	0	0	1	1	2	9	3	12	4.2
Texas	18,476	3	2	5	0	0	0	0	0	0	3	2	5	2.7
Wright	13,690	3	4	7	0	0	0	0	2	2	3	6	9	5.1
Douglas	9,279	1	1	2	0	0	0	1	0	1	2	1	3	2.2
Oregon	9,165	1	1	2	1	0	1	0	0	0	2	1	3	2.2
Shannon	7,232	0	3	3	0	0	0	0	0	0	0	3	3	4.1
Ozark	6,201	0	2	2	0	0	0	0	1	1	0	3	3	3.2
Region Total	87,850	16	15	31	1	0	1	2	4	6	19	19	38	3.5
MERAMEC														
Phelps	30,164	11	5	16	0	1	1	3	0	3	14	6	20	5.3
Washington	15,255	2	2	4	0	0	0	0	0	0	2	2	4	2.6
Crawford	15,141	6	2	8	0	0	0	0	0	0	6	2	8	5.3
Gasconade	11,896	6	6	12	0	0	0	0	0	0	6	6	12	10.1
Dent	11,612	3	2	5	0	1	1	1	0	1	4	3	7	4.3
Maries	6,836	0	2	2	0	0	0	0	0	0	0	2	2	2.9
Region Total	90,904	28	19	47	0	2	2	4	0	4	32	21	53	5.2
LAKE OF THE OZARKS														
Pulaski	55,033	11	7	18	2	0	2	0	0	0	13	7	20	3.3
Laclede	20,140	7	2	9	0	0	0	1	1	2	8	3	11	4.5
Miller	15,228	1	5	6	1	1	2	1	2	3	3	8	11	3.9
Camden	13,910	5	3	8	0	0	0	2	1	3	7	4	11	5.8
Morgan	10,058	5	2	7	0	0	0	1	2	3	6	4	10	7.0
Region Total	114,369	29	19	48	3	1	4	5	6	11	37	26	63	4.2
SOUTHEAST MISSOURI														
Cape Girardeau	50,388	53	4	57	2	0	2	4	0	4	59	4	63	11.3
St. Francois	37,044	28	13	41	3	0	3	2	2	4	33	15	48	11.1
Perry	14,448	7	0	7	0	0	0	1	1	2	8	1	9	4.8
Ste. Genevieve	13,018	5	1	6	0	0	0	0	0	0	5	1	6	4.6
Iron	9,740	3	0	3	0	0	0	0	0	0	3	0	3	3.1
Bollinger	8,838	1	1	2	0	0	0	0	1	1	1	2	3	2.3
Madison	8,620	2	2	4	0	0	0	1	0	1	3	2	5	4.6
Region Total	142,096	99	21	120	5	0	5	8	4	12	112	25	137	8.4
BOOTHEEL														
Scott	33,471	24	5	29	0	0	0	3	1	4	27	6	33	8.7
Dunklin	33,414	17	2	19	1	0	1	0	0	0	18	2	20	5.7
Stoddard	25,556	4	7	11	1	1	2	0	1	1	5	9	14	4.3
Pemiscot	25,536	10	1	11	0	0	0	1	0	1	11	1	12	4.3
New Madrid	22,850	7	1	8	0	0	0	3	0	3	10	1	11	3.5
Mississippi	16,356	5	7	12	0	0	0	1	0	1	6	7	13	7.3
Region Total	157,183	67	23	90	2	1	3	8	2	10	77	26	103	5.7

TABLE 2 (*Continued*)

Location	*Population*	*Active* M.D.	*Active* D.O.	*Active* TOTAL	*In Training* M.D.	*In Training* D.O.	*In Training* TOTAL	*Retired* M.D.	*Retired* D.O.	*Retired* TOTAL	*Total Registered* M.D.	*Total Registered* D.O.	*Total Registered* TOTAL	*Active Physicians Per 10,000 Population*
OZARK FOOTHILLS														
Butler	33,590	41	2	43	0	0	0	1	0	1	42	2	44	12.8
Ripley	9,929	2	2	4	0	0	0	0	0	0	2	2	4	4.0
Wayne	8,586	1	3	4	0	0	0	0	0	0	1	3	4	4.7
Reynolds	6,234	0	2	2	0	0	0	0	0	0	0	2	2	3.2
Carter	3,894	0	1	1	0	0	0	0	0	0	0	1	1	2.6
Region Total	62,233	44	10	54	0	0	0	1	0	1	45	10	55	8.7

ences. The two rural regions with the highest physician rate per 10,000 population are in the southeast portion of the state, and the rate in these two regions is almost double that of the two areas with the fewest physicians per population that are in the Central Ozark plateau in the center of the southern portion of the state. But comparing the 13 rural regions, the pattern of distribution of physicians is not as clear as for urban and teaching centers. The northwest corner of the state has 4.6 physicians per 10,000 population (very nearly like that in the Ozark plateau), but the Green Hills region adjoining Northwest has 6.2 and the Missouri Valley region has 7.2. The other rural regions on the western side of the state, Kaysinger Basin and Show-Me, have 6.7 and 7.3 physicians per 10,000 population and, thus, are intermediate. Hassinger and Hobbs also have noted that the rural areas have fewer physicians (and fewer dentists and general hospital beds as well). Olson, too, found the lowest ratio of physicians to population in the Central Ozarks region in his study, although it was a somewhat different group of counties.

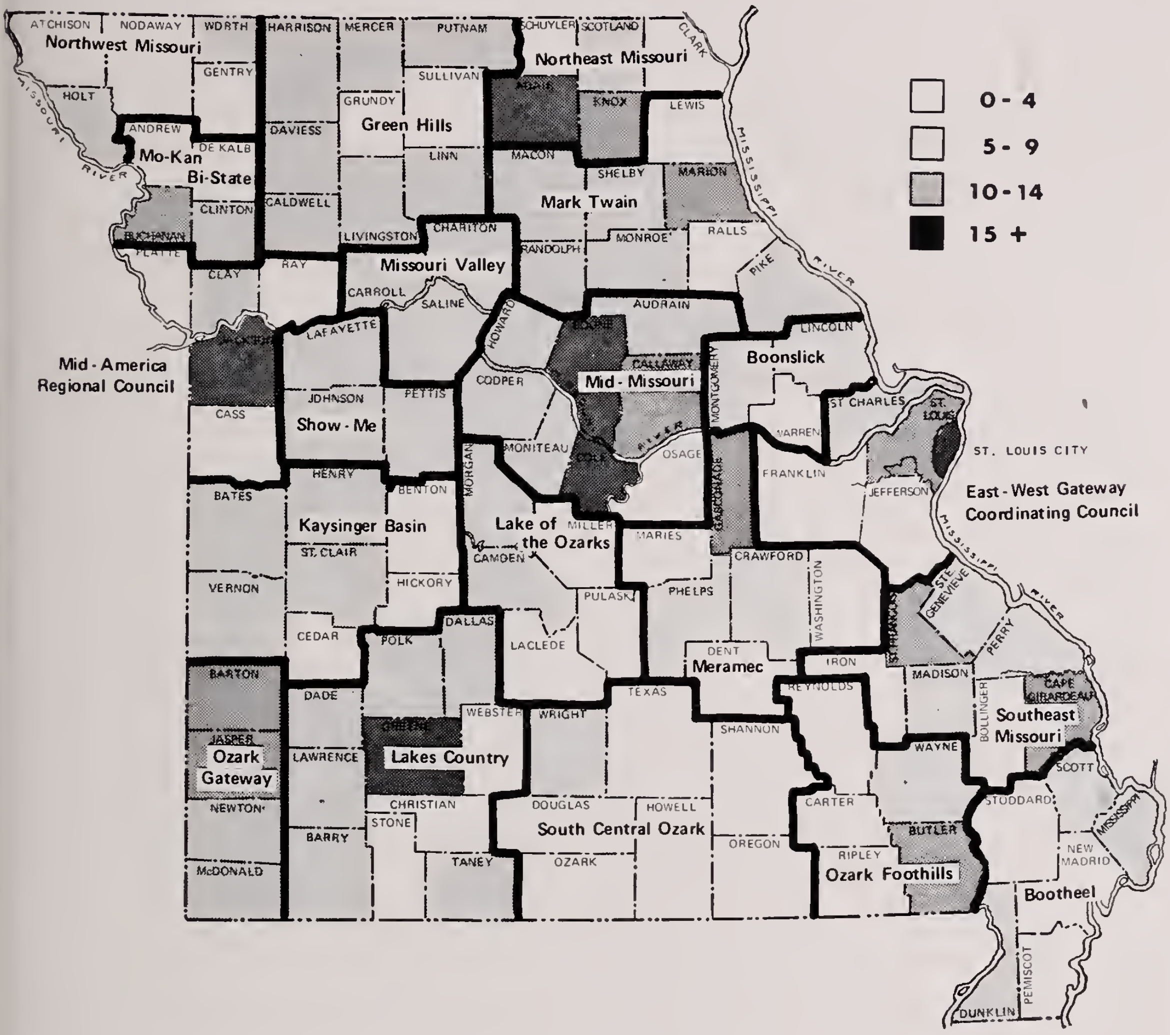
Clearly, there are fewer physicians practicing in rural areas in Missouri than in urbanized regions. In fact, only one county of the more than 70 counties in the remaining rural regions has a rate above that for the average of the metropolitan regions. Butler County in the Ozark Foothills region has 12.8 physicians per 10,000 population, but contains the city of Poplar Bluff as an urban center and is the location of three private hospitals and one veterans' hospital.

Counties

The data reported above, as has been noted, are on the basis of the Regional Planning Commission areas as assigned by the Governor. Referring again to Table 2, variation in the number of physicians per 10,000 population is even more pronounced when individual counties within the same region are considered. In those regions containing metropolitan areas, for example, St. Louis City has a rate of 19.5 physicians per 10,000 population and St. Louis County has 10.5. Significantly different are the rates for Jefferson (3.2), St. Charles (5.6) and Franklin (4.4) counties in that same region. Obviously, even within the St. Louis metropolitan area, one sees the same tendency for physicians to concentrate in the heavily urbanized portions. In fact, there is a tendency for those counties with the lowest ratio of physicians to popula-

Active Registered Physicians (M.D. and D.O.) per 10,000 Population

July 1971


0 - 4
5 - 9
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15 +
Northwest Missouri
Mo-Kan Bi-State
Green Hills
Northeast Missouri
Mark Twain
Missouri Valley
Mid-America Regional Council
Show-Me
Mid-Missouri
Boonslick
East-West Gateway Coordinating Council
Kaysinger Basin
Lake of the Ozarks
Meramec
Southeast Missouri
Ozark Gateway
Lakes Country
South Central Ozark
Ozark Foothills
Bootheel
ATCHISON
NODAWAY
WORTH
HARRISON
MERCER
PUTNAM
SCHUYLER
SCOTLAND
CLARK
HOLT
GENTRY
SULLIVAN
ADAIR
KNOX
LEWIS
ANDREW
DE KALB
DAVIESS
GRUNDY
LINN
MACON
SHELBY
MARION
BUCHANAN
CLINTON
CALDWELL
LIVINGSTON
CHARITON
RANDOLPH
MONROE
RALLS
PLATTE
CLAY
RAY
CARROLL
SALINE
AUDRAIN
PIKE
LINCOLN
JACKSON
LAFAYETTE
HOWARD
BOONE
CALLAWAY
MONTGOMERY
ST CHARLES
ST. LOUIS
ST. LOUIS CITY
CASS
JOHNSON
PETTIS
COOPER
MONITEAU
COLE
OSAGE
WARREN
FRANKLIN
JEFFERSON
BATES
HENRY
BENTON
MORGAN
MILLER
MARIES
GASCONADE
ST. CLAIR
CAMDEN
CRAWFORD
VERNON
HICKORY
PULASKI
PHELPS
WASHINGTON
STE. GENEVIEVE
PERRY
ST. FRANCOIS
CEDAR
POLK
DALLAS
LACLEDE
DENT
IRON
MADISON
BARTON
DADE
WEBSTER
WRIGHT
TEXAS
REYNOLDS
CAPE GIRARDEAU
BOLLINGER
JASPER
LAWRENCE
GREENE
SHANNON
WAYNE
SCOTT
NEWTON
CHRISTIAN
DOUGLAS
HOWELL
CARTER
STODDARD
STONE
BARRY
BUTLER
MISSISSIPPI
NEW MADRID
McDONALD
TANEY
OZARK
OREGON
RIPLEY
PEMISCOT
DUNKLIN
MISSOURI RIVER
MISSISSIPPI RIVER

Fig. 1 REGIONAL PLANNING COMMISSION AREAS. The Regional Planning Commission areas, to the maximum extent possible, are based on similar functions, shopping and commercial patterns and similar geographic features. Most regions have an urban center with major business concentrations. More important for this study, as also shown in the report by Hassinger and Hobbs, the urban center of the region also usually includes the major medical facilities of the region.

In Missouri, the establishment of the 20 Regional Planning Commission areas began in 1966 and continued through 1969, when the present boundaries were fixed. Each of Missouri's 114 counties and the independent city of St. Louis were assigned as noted to one of the 20 regions. Most regions contain five or more counties, but some have as few as three (Missouri Valley, Show-Me and Boonslick), and one has as many as ten (Lakes Country). For the two largest metropolitan areas, St. Louis (East-West Gateway Coordinating Council) and Kansas City (Mid-America Regional Council), the Regional Council), the Regional Planning Commission boundaries are identical with the Missouri portion of the corresponding Standard Metropolitan Statistical Areas defined by the Census Bureau with the exception of Ray County in the Kansas City region. Three other Missouri regions contain metropolitan areas, as defined by the Bureau of the Census. The Lakes Country (Springfield), Mid-Missouri (Columbia), and Mo-Kan Bi-State (St. Joseph) regions are called "metropolitan" for this report, even though they contain rural counties as well as the densely urbanized counties.

TABLE 3

ACTIVE PHYSICIANS REGISTERED BY MISSOURI FOR REGIONAL PLANNING COMMISSION AREAS WITH PERCENTS AND RATES PER 10,000 POPULATION—JULY, 1971

All Physicians (M.D. and D.O.)

Location	*Number*		*Percent*		*Rate*
	POPULATION	PHYSICIANS	POPULATION	PHYSICIANS	
METROPOLITAN REGIONS (Missouri Portion)					
East-West Gateway Coordinating Council	1,865,454	2,345	39.3	44.7	12.6
Mid-America Regional Council	881,824	1,144	18.6	21.8	13.0
Lakes Country	288,868	300	6.1	5.7	10.4
Mid-Missouri	230,407	392	4.9	7.5	17.0
Mo-Kan Bi-State	119,012	109	2.5	2.1	9.2
NON-METROPOLITAN REGIONS					
Northwest Missouri	49,847	23	1.0	0.4	4.6
Green Hills	87,379	54	1.8	1.0	6.2
Missouri Valley	48,425	35	1.0	0.7	7.2
Northeast Missouri	46,841	87	1.0	1.7	18.6
Mark Twain	119,341	88	2.5	1.7	7.4
Boonslick	39,388	18	0.8	0.3	4.6
Ozark Gateway	136,645	130	2.9	2.5	9.5
Kaysinger Basin	84,491	57	1.8	1.1	6.7
Show-Me	96,031	70	2.0	1.3	7.3
South Central Ozark	87,850	31	1.9	0.6	3.5
Meramec	90,904	47	1.9	0.9	5.2
Lake of the Ozarks	114,369	48	2.4	0.9	4.2
Southeast Missouri	142,096	120	3.0	2.3	8.4
Bootheel	157,183	90	3.3	1.7	5.7
Ozark Foothills	62,233	54	1.3	1.0	8.7
Metropolitan total	3,385,565	4,290	71.3	81.8	12.7
Non-Metropolitan total	1,363,023	952	28.7	18.2	7.0
Missouri total	4,748,588	5,242	100.0	100.0	11.0

tion to adjoin the large urban concentrations. In the Kansas City region, Jackson County's rate of 15.0 is five times the 3.0 rate for adjacent Platte County. In Mid-Missouri, the same pattern is evident, but with a slight difference. The Boone County (Columbia) rate is 28.5. Two contiguous counties have the next highest rates. They are Cole (15.1), which contains Jefferson City (the state capital), and Callaway (11.4), which contains two colleges and a large state mental hospital. Osage County, which is adjacent to Cole and Callaway counties, has the lowest rate of the eight counties in the Mid-Missouri region (3.6). As a final example, De Kalb County has no physicians and adjoins Buchanan County (St. Joseph), which has a rate of 10.8 per 10,000.

Variations in regions predominately rural tend to be less marked than between counties in the metropolitan regions. Of the nine counties in the Green Hills area, Livingston County with 7.8 has the highest rate per 10,000 population and Sullivan County with the lowest rate is half with 4.0. Kaysinger Basin, another predominately rural area, contains Vernon County with 8.9 as the highest and Benton County with 4.1 as the lowest.

Although there is variation among counties of the same region, rates within regions tend to follow the same pattern. The South Central Ozark region has the lowest rate of physicians to population of all regions in Missouri. Within that region, Wright County has the highest rate of 5.1 physicians per 10,000 population. Although the highest within the region, this is below the average of all the nonmetropolitan regions in the state. Furthermore, three counties in that region, Douglas, Oregon and Texas, have rates below 3.0 and are among the counties having the lowest rate of physicians to population in the entire state.

DISTRIBUTION OF PHYSICIANS BY SPECIALTY

The trend to physician specialization began many years ago. Today, only a minority of physicians enter general practice. Many hope that the recent development of family practice as a specialty will lead to a larger number of physicians in general or family practice. In any event, it is important in evaluating physician availability to distinguish between those physicians who deal with a broad range of illnesses as do general or family practitioners and specialists, who restrict their practice and typically see patients referred by the general or family practitioner.

The difference between the primary care physician and the specialist is basic and involves much more than whether the patient is cared for by the family practitioner or is referred to a specialist. The general public usually expresses its concern in the demand that a physician be available when needed and within a reasonable time and distance. On the other hand, health professionals, while recognizing that problem, are additionally concerned that there may not be available the specialists and the needed facilities to care for the rare or unusual or life-threatening illnesses.

This report is based upon information obtained from physicians as to the percentage of time given to general practice or specialty practice if the physician functioned in more than one capacity and in which specialties. The numbers in this section of the report, therefore, are based on percentages of time in different kinds of practice and are not a direct count of individual physicians. Board certification is not reflected in our figures. A noncertified physician who limits his practice to a particular specialty is as unavailable for primary care as one who is board certified. The importance of the distinction between general or family practitioners and specialists is clearly demonstrated, for it is seen that there are sharp differences in the distribution throughout Missouri of these different kinds of physician services.

This report has shown in its previous sections that physicians tend to be concentrated in urban areas. It is obvious that this overall tendency is much more marked for physician specialists. Indeed, it is the concentration of specialists in urban areas that results in the ratio of 12.7 physicians per 10,000 population in metropolitan regions contrasted with the 7.0 in nonmetropolitan regions.

It may surprise many to learn that if one looks only at the family or general practitioner, there are more in rural regions (4.0 per 10,000 population) than in metropolitan regions where the rate is half that number (2.3). If one includes the group in internal medicine among primary physicians, as some internists recommend,[6] the degree of difference is reduced, but a slight advantage still is found; the nonmetropolitan regions have 4.3 compared to the metropolitan regions' 4.0. The distribution of general and family practitioners, therefore, is a reversal of the pattern evidenced by physicians as a whole.

In this report, the finding that there is a higher rate of general or family practitioners in rural regions than in metropolitan areas is different than in some other reports which show the rates to be about the same. Some of the differences between this report and others may again be due to the methods of the report. As noted above, this report is based on percent of time in different kinds of practice in contrast to other studies in which a physician was counted only within one category of practice.

Metropolitan St. Louis has the lowest supply of family practitioners in the state, 1.8 per 10,000 population. Nonmetropolitan Missouri Valley, just northeast of Kansas City, has 6.2 general practitioners for each 10,000 people, which is the highest rate in Missouri. That region of Missouri which has the least physicians of any area of the state, South Central Ozark, has a rate of general or family practitioners of 3.3, which is almost double the rate of family practitioners in the St. Louis region and higher than the rate in all but one of the metropolitan regions. However, the 3.3 rate of the South Central Ozark region, although higher than most metropolitan regions, is the second lowest of the 13 rural regions. The Lake of the Ozarks region, adjoining South Central Ozark to the northwest, has the lowest rate (3.0 family practitioners per 10,000 population).

Physicians in internal medicine and its subspecialties are heavily concentrated in the metropolitan regions and in the Northeast Missouri region. The metropolitan rate is 2.4 per 10,000 population. This is six times the nonmetropolitan rate of 0.4. The St. Louis region has the highest rate with 2.6. Mid-America (Kansas City) and Mid-Missouri (Columbia) are slightly less with rates of 2.3. Lakes Country (Springfield) and Mo-Kan Bi-State (St. Joseph) have rates of 1.8 and 1.4, respectively. Here, again, it must be kept in mind that these figures represent a summation based on percentages and are not based on physicians who are board certified or otherwise categorized as specialists or family practitioners.

None of the nonmetropolitan Missouri regions, with the exception of Northeast Missouri with 2.0, have rates in excess of 1.0. The northwest portion of Missouri, consisting of the Northwest Missouri, Green Hills and Missouri Valley regions, have the lowest rates of internal medicine services in the state. No medical specialists have their primary offices in the Northwest Missouri region. Green Hills' rate is 0.1 and Missouri Valley's rate is only 0.2.

Surgery, obstetrics and pediatrics, the other "direct care" specialties (Table 4), show similar relationships between metropolitan and nonmetropolitan rates. With only three exceptions, every region contains physicians providing care in these specialties. The exceptions are Missouri Valley with no obstetrician and Green Hills and Boonslick with no psychiatrist. (In these tables, a rate of 0.0 indicates that some care is available, but the rate per 10,000 is less than 0.05.)

Table 4 summarizes the other clinical specialties, such as radiology and anesthesiology. Here the same rate differential between metropolitan and nonmetropolitan Missouri is apparent. More regions, however, appear to completely lack these services. Four regions—Missouri Valley, Boonslick, South Central Ozark and Meramec—have no radiologist based in the region. Seven regions have no anesthesiologists; another seven have no pathologists.

It must not be assumed, however, that the services of radiology or pathology specialists are not available. What this report shows is that they do not live in or have their principal offices in the region. All hospitals provide for radiology and pathology services, but these may be provided by specialists who give only a portion of their time to that hospital. In effect, some physicians "ride circuit" and provide services to many hospitals. It would be inaccurate, therefore, to assume that the service was not available, but it is probably valid to infer that the

TABLE 4

FULL-TIME ACTIVE PHYSICIAN EQUIVALENTS PER 10,000 POPULATION FOR MISSOURI REGIONAL PLANNING COMMISSION AREAS—JULY, 1971

All Physicians (M.D. and D.O.)

Location	*Family Practice*	*Int Med*	*Med Subsp*	*Gen Surg*	*Surg Subsp Incl EENT*	*Ob-Gyn*	*Ped*	*Psych and Neuro*	*Total Direct Care*
METROPOLITAN REGIONS (Missouri Portion)									
East-West Gateway	1.8	1.9	0.7	1.2	1.7	0.9	0.7	1.1	10.1
Mid-America Regional Council	3.0	1.7	0.6	1.1	2.0	0.8	0.7	0.8	10.6
Lakes Country	3.1	1.4	0.4	1.1	1.7	0.5	0.5	0.4	9.1
Mid-Missouri	3.3	1.3	1.0	1.5	1.9	0.6	0.8	1.5	11.9
Mo-Kan Bi-State	2.6	0.8	0.6	1.1	1.1	0.7	0.4	0.8	8.0
NON-METROPOLITAN REGIONS									
Northwest Missouri	4.0	—	—	0.3	0.2	0.0	0.0	0.0	4.6
Green Hills	4.4	0.1	0.0	0.7	0.2	0.1	0.0	—	5.6
Missouri Valley	6.2	0.2	—	0.3	0.1	—	0.2	0.1	7.0
Northeast Missouri	5.9	1.5	0.5	1.4	0.6	0.5	1.5	0.9	12.8
Mark Twain	4.5	0.3	0.2	0.6	0.4	0.4	0.3	0.1	6.7
Boonslick	3.5	—	—	0.6	—	0.1	0.1	—	4.3
Ozark Gateway	4.0	0.8	0.1	1.3	1.0	0.7	0.3	0.2	8.3
Kaysinger Basin	4.6	0.1	0.1	0.4	0.1	0.3	0.1	0.4	6.1
Show-Me	4.1	0.4	—	0.6	0.7	0.5	0.3	0.0	6.5
South Central Ozark	3.3	0.1	—	0.1	—	0.1	0.1	0.0	3.6
Meramec	3.7	0.1	0.2	0.4	—	0.3	0.4	0.0	5.0
Lake of the Ozarks	3.0	0.1	—	0.2	0.0	0.2	0.2	0.1	3.7
Southeast Missouri	3.8	0.5	0.5	0.8	0.7	0.6	0.1	0.4	7.5
Bootheel	3.5	0.2	0.1	0.7	0.4	0.2	0.2	0.0	5.3
Ozark Foothills	4.6	0.8	0.0	0.9	0.6	0.3	0.3	0.0	7.5
Metropolitan total	2.3	1.7	0.7	1.2	1.8	0.8	0.7	1.0	10.2
Non-Metropolitan total	4.0	0.3	0.1	0.6	0.4	0.3	0.2	0.1	6.2
Missouri total	2.8	1.3	0.5	1.0	1.4	0.7	0.6	0.7	9.0

TABLE 4 *(Continued)*

Location	*X-ray*	*Anesthesiology*	*Pathology*	*All Other Clinical*	*Other Clinical Care*
METROPOLITAN REGIONS (Missouri Portion)					
East-West Gateway	0.5	0.3	0.6	0.2	1.6
Mid-America Regional Council	0.5	0.6	0.5	0.3	1.9
Lakes Country	0.4	0.3	0.3	0.1	1.0
Mid-Missouri	0.9	0.8	0.9	0.2	2.8
Mo-Kan Bi-State	0.4	0.1	0.3	0.1	1.0
NON-METROPOLITAN REGIONS					
Northwest Missouri	0.0	—	—	—	0.0
Green Hills	0.1	0.3	—	0.0	0.4
Missouri Valley	—	0.0	—	—	0.0
Northeast Missouri	0.8	0.4	0.2	0.7	2.0
Mark Twain	0.2	0.2	0.2	0.0	0.6
Boonslick	—	—	—	—	—
Ozark Gateway	0.5	0.2	0.2	—	0.8
Kaysinger Basin	0.1	0.1	0.1	0.1	0.4
Show-Me	0.3	0.1	0.1	0.0	0.6
South Central Ozark	—	—	—	—	—
Meramec	—	—	—	—	—
Lake of the Ozarks	0.2	—	—	—	0.2
Southeast Missouri	0.4	0.2	0.1	—	0.7
Bootheel	0.1	—	0.1	—	0.2
Ozark Foothills	0.5	—	0.2	—	0.7
Metropolitan total	0.5	0.4	0.5	0.2	1.7
Non-Metropolitan total	0.2	0.1	0.1	0.0	0.5
Missouri total	0.4	0.3	0.4	0.2	1.4

Location	*Total Direct Care*	*Other Clinical Care*	*Total Clinical Care*	*Non-Clinical*	*Unknown and Not Stated*	*Grand Total*
METROPOLITAN REGIONS (Missouri Portion)						
East-West Gateway	10.1	1.6	11.7	0.4	0.5	12.6
Mid-America Regional Council	10.6	1.9	12.5	0.3	0.3	13.0
Lakes Country	9.1	1.0	10.1	0.3	0.1	10.4
Mid-Missouri	11.9	2.8	14.7	1.8	0.6	17.1
Mo-Kan Bi-State	8.0	1.0	9.0	0.2	—	9.2
NON-METROPOLITAN REGIONS						
Northwest Missouri	4.6	0.0	4.6	—	—	4.6
Green Hills	5.6	0.4	6.0	—	0.2	6.2
Missouri Valley	7.0	0.0	7.0	—	0.2	7.2
Northeast Missouri	12.8	2.0	14.8	1.3	2.4	18.6
Mark Twain	6.7	0.6	7.3	0.1	—	7.4
Boonslick	4.3	—	4.3	—	0.3	4.6
Ozark Gateway	8.3	0.8	9.1	0.0	0.4	9.5
Kaysinger Basin	6.1	0.4	6.5	0.0	0.2	6.7
Show-Me	6.5	0.6	7.1	0.1	—	7.3
South Central Ozark	3.6	—	3.6	—	—	3.5
Meramec	5.0	—	5.0	0.0	0.1	5.2
Lake of the Ozarks	3.7	0.2	3.9	0.0	0.3	4.2
Southeast Missouri	7.5	0.7	8.2	0.1	0.1	8.4
Bootheel	5.3	0.2	5.5	0.0	0.2	5.7
Ozark Foothills	7.5	0.7	8.2	0.3	0.2	8.7
Metropolitan total	10.2	1.7	11.9	0.4	0.4	12.7
Non-Metropolitan total	6.2	0.5	6.7	0.1	0.2	7.0
Missouri total	9.0	1.4	10.4	0.3	0.4	11.0

services of these specialists are not as readily available as they would be in the regions where they are concentrated.

Table 4 permits a comparison of regions in terms of those categories of physicians directly involved with "clinical care." Physicians in nonclinical fields of medicine, such as administrators, are shown separately as are those whose specialties are unknown. Physicians in administrative positions should be excluded if one is trying to assess availability of medical services.

From this and the preceding tables, it is evident that the "doctor shortage" is not merely one of numbers. Even for those physicians in clinical care, specialties should be examined. One area may have pediatricians but no anesthesiologists; in another area, the reverse may be true.

DISTRIBUTION OF MEDICAL DOCTORS AND OSTEOPATHIC PHYSICIANS

Licensed physicians in Missouri may have received either the M.D. degree following medical school training or the D.O. degree from a school of osteopathy. Of Missouri's 5,242 physicians in active practice, 4,405 (approximately 85%) have the M.D. degree and 837 (approximately 15%) have the D.O. degree. Distribution by region is shown in Table 5.

Missouri has a high proportion of osteopathic physicians compared with the United States as a whole. As mentioned previously, exact comparison with United States figures cannot be made because of the lack of similar data. Best available national figures that permit exclusion of physicians in training, however, show 259,617 active M.D.'s and 10,606 active D.O.'s[7] for rates of 12.6 and 0.5, respectively. Missouri's rate of 1.8 osteopathic physicians per 10,000 population is nearly four times the 0.5 rate for the United States. The relatively high proportion of osteopathic physicians in Missouri is undoubtedly influenced by the presence of two schools of osteopathic medicine—one at Kirksville and the other in Kansas City.

On the other hand, Missouri has only 9.3 licensed M.D.'s in active practice per 10,000 population in comparison to the 12.6 for the United

TABLE 5

DISTRIBUTION OF ACTIVE MEDICAL DOCTORS AND OSTEOPATHIC PHYSICIANS BY REGION WTH PERCENTS AND RATES PER 10,000 POPULATION—JULY, 1971

	Number		*Percent of State Total*		*Percent of Region Total*		*Rate*	
Location	M.D.	D.O.	M.D.	D.O.	M.D.	D.O.	M.D.	D.O.
METROPOLITAN REGIONS (Missouri Portion)								
East-West Gateway	2,192	153	49.8	18.3	93.5	6.5	11.8	0.8
Mid-America Regional Council	942	202	21.4	24.1	82.3	17.7	10.7	2.3
Lakes Country	255	45	5.8	5.4	85.0	15.0	8.8	1.6
Mid-Missouri	340	52	7.7	6.2	86.7	13.3	14.8	2.3
Mo-Kan Bi-State	91	18	2.1	2.2	83.5	16.5	7.6	1.5
NON-METROPOLITAN REGIONS								
Northwest Missouri	16	7	0.4	0.8	69.6	30.4	3.2	1.4
Green Hills	27	27	0.6	3.2	50.0	50.0	3.1	3.1
Missouri Valley	23	12	0.5	1.4	65.7	34.3	4.7	2.5
Northeast Missouri	5	82	0.1	9.8	5.7	94.3	1.1	17.5
Mark Twain	46	42	1.0	5.0	52.3	47.7	3.9	3.5
Boonslick	6	12	0.1	1.4	33.3	66.7	1.5	3.0
Ozark Gateway	90	40	2.0	4.8	69.2	30.8	6.6	2.9
Kaysinger Basin	38	19	0.9	2.3	66.7	33.3	4.5	2.2
Show-Me	51	19	1.2	2.3	72.9	27.1	5.3	2.0
South Central Ozark	16	15	0.4	1.8	51.6	48.4	1.8	1.7
Meramec	28	19	0.6	2.3	59.6	40.4	3.1	2.1
Lake of the Ozarks	29	19	0.7	2.3	60.4	39.6	2.5	1.7
Southeast Missouri	99	21	2.2	2.5	82.5	17.5	7.0	1.5
Bootheel	67	23	1.5	2.7	74.4	25.6	4.3	1.5
Ozark Foothills	44	10	1.0	1.2	81.5	18.5	7.1	1.6
Metropolitan total	3,820	470	86.7	56.2	89.0	11.0	11.3	1.4
Non-Metropolitan total	585	367	13.3	43.8	61.4	38.6	4.3	2.7
Missouri total	4,405	837	100.0	100.0	84.0	16.0	9.3	1.8

States. After taking into account the different methods, it is reasonable to assume that the Missouri rate of M.D.'s to population is lower than that for the United States. It is evident that it is the substantial number of practicing osteopathic physicians that brings Missouri's total physician rate close to the average rate for the United States.

There are substantial differences between M.D.'s and D.O.'s in terms of both their location and the percent who are specialized. In general, physicians with the M.D. degree are more likely to be located in urban areas and be specialists. Conversely, osteopathic physicians are more likely to be located in rural areas and be engaged in general or family practice.

In the five metropolitan regions, there are 3,820 M.D.'s and 470 D.O.'s. That is, of all the physicians in metropolitan regions, almost 90% are M.D.'s and 11% are D.O.'s. In rural Missouri, however, nearly 40% of the physicians are D.O.'s. Of the 952 physicians in active practice in nonmetropolitan Missouri, 585 have the M.D. degree and 367 have the D.O. degree. This is in sharp contrast to the distribution in metropolitan regions.

Looking at specialization of physician services provided by M.D.'s, approximately only 20% are in general or family practice; that is, more than four fifths are in specialized care. In an earlier section, it was shown that physicians in metropolitan areas were more specialized than those in rural areas. This is especially true for M.D.'s. In metropolitan regions, only 13% of M.D. physicians' service is in general or family practice. The tendency for M.D.'s as a group to be highly specialized is exemplified by the fact that even in the rural areas, half of M.D. physicians' service is given in specialized care. In contrast, the majority of the care provided by D.O.'s is in general or family practice; only one third is specialized.

The comparison of osteopathic physician distribution between urban and rural Missouri is markedly influenced by the location of the two schools of osteopathic medicine. The Kirksville

TABLE 6

FULL-TIME ACTIVE PHYSICIAN EQUIVALENTS PER 10,000 POPULATION FOR MISSOURI REGIONAL PLANNING COMMISSION AREAS—JULY, 1971

Doctors of Medicine (M.D.)

Location	*Family Practice*	*Int Med*	*Med Subsp*	*Gen Surg*	*Surg Subsp Incl EENT*	*Ob-Gyn*	*Ped*	*Psych and Neuro*	*Total Direct Care*
METROPOLITAN REGIONS (Missouri Portion)									
East-West Gateway	1.3	1.8	0.7	1.1	1.6	0.9	0.7	1.1	9.3
Mid-America Regional Council	1.6	1.6	0.6	1.0	1.8	0.7	0.7	0.7	8.6
Lakes Country	1.7	1.4	0.4	1.0	1.7	0.5	0.4	0.4	7.6
Mid-Missouri	1.9	1.2	1.0	1.4	1.8	0.6	0.8	1.3	9.9
Mo-Kan Bi-State	1.5	0.8	0.5	0.9	1.0	0.7	0.4	0.8	6.6
NON-METROPOLITAN REGIONS									
Northwest Missouri	2.8	—	—	0.2	0.2	—	—	0.0	3.2
Green Hills	2.3	—	—	0.4	0.1	0.0	0.0	—	2.8
Missouri Valley	4.0	0.2	—	0.1	0.1	—	0.2	0.0	4.5
Northeast Missouri	0.6	0.0	—	0.0	—	0.0	0.2	—	0.9
Mark Twain	1.3	0.3	0.2	0.5	0.4	0.3	0.2	0.1	3.3
Boonslick	1.4	—	—	0.2	—	—	—	—	1.5
Ozark Gateway	2.1	0.8	0.1	1.0	0.7	0.6	0.3	0.2	5.8
Kaysinger Basin	3.0	0.1	0.1	0.4	0.1	0.1	—	0.4	4.1
Show-Me	2.6	0.3	—	0.6	0.4	0.5	0.2	—	4.6
South Central Ozark	1.7	0.1	—	0.1	—	0.0	0.0	—	1.9
Meramec	1.9	—	0.2	0.2	—	0.3	0.4	0.0	2.9
Lake of the Ozarks	1.5	0.1	—	0.1	0.0	0.1	0.2	0.1	2.1
Southeast Missouri	2.7	0.5	0.4	0.8	0.7	0.6	0.1	0.4	6.2
Bootheel	2.3	0.2	0.1	0.6	0.3	0.2	0.2	0.0	3.8
Ozark Foothills	3.1	0.8	0.0	0.9	0.6	0.2	0.3	0.0	6.0
Metropolitan total	1.5	1.7	0.6	1.1	1.7	0.8	0.7	1.0	8.9
Non-Metropolitan total	2.2	0.3	0.1	0.5	0.3	0.3	0.2	0.1	3.8
Missouri total	1.7	1.3	0.5	0.9	1.3	0.6	0.5	0.7	7.5

TABLE 6 (*Continued*)

Location	*X-ray*	*Anesthesiology*	*Pathology*	*All Other Clinical*	*Other Clinical Care*
METROPOLITAN REGIONS (Missouri Portion)					
East-West Gateway	0.5	0.3	0.5	0.2	1.6
Mid-America Regional Council	0.4	0.6	0.5	0.3	1.7
Lakes Country	0.4	0.2	0.3	0.1	0.9
Mid-Missouri	0.8	0.7	0.9	0.2	2.7
Mo-Kan Bi-State	0.3	0.1	0.3	0.1	0.9
NON-METROPOLITAN REGIONS					
Northwest Missouri	—	—	—	—	—
Green Hills	0.1	0.1	—	—	0.2
Missouri Valley	—	0.0	—	—	0.0
Northeast Missouri	—	—	—	—	—
Mark Twain	0.2	0.2	0.2	0.0	0.5
Boonslick	—	—	—	—	—
Ozark Gateway	0.4	0.1	0.2	—	0.6
Kaysinger Basin	0.1	0.0	0.1	—	0.3
Show-Me	0.3	0.1	0.1	—	0.5
South Central Ozark	—	—	—	—	—
Meramec	—	—	—	—	—
Lake of the Ozarks	0.2	—	—	—	0.2
Southeast Missouri	0.3	0.1	0.1	—	0.5
Bootheel	0.1	—	0.1	—	0.3
Ozark Foothills	0.5	—	0.2	—	0.6
Metropolitan total	0.5	0.4	0.5	0.2	1.6
Non-Metropolitan total	0.2	0.1	0.1	0.0	0.3
Missouri total	0.4	0.3	0.4	0.1	1.2

Location	*Total Direct Care*	*Other Clinical Care*	*Total Clinical Care*	*Non-Clinical*	*Unknown and Not Stated*	*Grand Total*
METROPOLITAN REGIONS (Missouri Portion)						
East-West Gateway	9.3	1.6	10.9	0.4	0.5	11.8
Mid-America Regional Council	8.6	1.7	10.3	0.2	0.2	10.7
Lakes Country	7.6	0.9	8.5	0.3	0.1	8.9
Mid-Missouri	9.9	2.7	12.6	1.7	0.5	14.8
Mo-Kan Bi-State	6.6	0.9	7.5	0.2	—	7.6
NON-METROPOLITAN REGIONS						
Northwest Missouri	3.2	—	3.2	—	—	3.2
Green Hills	2.8	0.2	3.0	—	0.1	3.1
Missouri Valley	4.5	0.0	4.5	—	0.2	4.7
Northeast Missouri	0.9	—	0.9	—	0.2	1.1
Mark Twain	3.3	0.5	3.8	0.0	—	3.9
Boonslick	1.5	—	1.5	—	—	1.5
Ozark Gateway	5.8	0.6	6.4	0.0	0.2	6.6
Kaysinger Basin	4.1	0.3	4.4	0.0	0.1	4.5
Show-Me	4.6	0.5	5.1	0.1	—	5.3
South Central Ozark	1.9	—	1.9	—	—	1.8
Meramec	2.9	—	2.9	0.0	0.1	3.1
Lake of the Ozarks	2.1	0.2	2.4	0.0	0.2	2.5
Southeast Missouri	6.2	0.5	6.7	0.1	0.1	7.0
Bootheel	3.8	0.3	4.1	—	0.2	4.3
Ozark Foothills	6.0	0.6	6.6	0.3	0.2	7.1
Metropolitan total	8.9	1.6	10.5	0.4	0.4	11.3
Non-Metropolitan total	3.8	0.3	4.1	0.0	0.1	4.3
Missouri total	7.5	1.2	8.7	0.3	0.3	9.3

School of Osteopathic Medicine is located in rural northeast Missouri. There are some osteopathic physician specialists in the other rural regions of Missouri, but the main group of osteopathic specialists in rural Missouri is concentrated in Kirksville (Northeast Missouri region), where there are more than ten D.O. specialists per 10,000 population. In the remaining 14 nonmetropolitan regions, there is less than one osteopathic specialist per 10,000 population.

The location in Kansas City of another school of osteopathy influences the higher concentration of D.O. specialists in that area as compared to St. Louis. In Kansas City, there is one osteopathic specialist per 10,000 people. The St. Louis region, which does not have an osteopathic school, has a rate only one third that of Kansas City. Detailed information regarding the rates for M.D.'s and D.O.'s is given in Tables 6 and 7.

The location of the two schools of osteopathic medicine thus tends to distort somewhat the general comparisons between urban and rural areas for osteopathic physicians, but it is apparent that doctors of osteopathy tend to locate in the more rural areas where they provide general or family practice services and, thus, contribute substantially to primary care in rural Missouri.

However, differences in the proportion of M.D./D.O. physicians also are seen between different rural areas of the state. Northeast Missouri with the Kirksville school and its surrounding regions (Green Hills, Mark Twain and Boonslick) have the highest percentages of osteopathic physicians of the total physicians in active practice in these regions. For this group of regions, almost four out of every five physicians in practice are doctors of osteopathy. In sharp contrast to the northeast rural regions are the two southeast regions of Missouri (Bootheel and Southeast Missouri), where more than four of every five physicians in active practice have an M.D. degree. In the St. Louis metropolitan region, on the other hand, almost 19 of every 20

TABLE 7

FULL-TIME ACTIVE PHYSICIAN EQUIVALENTS PER 10,000 POPULATION FOR MISSOURI REGIONAL PLANNING COMMISSION AREAS—JULY, 1971

Doctors of Osteopathy (D.O.)

Location	*Family Practice*	*Int Med*	*Med Subsp*	*Gen Surg*	*Surg Subsp Incl EENT*	*Ob-Gyn*	*Ped*	*Psych and Neuro*	*Total Direct Care*
METROPOLITAN REGIONS (Missouri Portion)									
East-West Gateway	0.5	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.7
Mid-America Regional Council	1.4	0.1	0.0	0.1	0.2	0.1	0.1	0.0	1.9
Lakes Country	1.4	0.0	0.0	0.1	0.0	0.0	0.0	—	1.5
Mid-Missouri	1.4	0.1	—	0.1	0.1	0.0	0.0	0.2	2.0
Mo-Kan Bi-State	1.1	0.0	0.0	0.1	0.1	0.0	—	—	1.4
NON-METROPOLITAN REGIONS									
Northwest Missouri	1.3	—	—	0.1	—	0.0	0.0	—	1.4
Green Hills	2.1	0.1	0.0	0.3	0.1	0.1	0.0	—	2.8
Missouri Valley	2.2	—	—	0.2	—	—	—	0.0	2.5
Northeast Missouri	5.4	1.5	0.5	1.4	0.6	0.5	1.3	0.9	11.9
Mark Twain	3.1	—	0.1	0.1	0.0	0.1	0.0	—	3.4
Boonslick	2.2	—	—	0.4	—	0.1	0.1	—	2.8
Ozark Gateway	1.9	0.1	0.0	0.3	0.2	0.1	0.0	—	2.5
Kaysinger Basin	1.6	—	—	—	—	0.2	0.1	0.1	1.9
Show-Me	1.6	0.0	—	0.0	0.2	0.0	0.0	0.0	1.9
South Central Ozark	1.6	—	—	0.0	—	0.1	0.0	0.0	1.7
Meramec	1.8	0.1	—	0.2	—	0.0	0.0	—	2.1
Lake of the Ozarks	1.4	—	—	0.1	—	0.1	—	—	1.6
Southeast Missouri	1.1	—	0.1	—	0.1	0.0	0.0	—	1.3
Bootheel	1.3	0.0	—	0.1	0.1	0.1	—	—	1.5
Ozark Foothills	1.5	—	—	—	0.0	0.1	0.0	—	1.6
Metropolitan total	0.9	0.1	0.0	0.1	0.1	0.0	0.0	0.0	1.2
Non-Metropolitan total	1.9	0.1	0.0	0.2	0.1	0.1	0.1	0.0	2.4
Missouri total	1.2	0.1	0.0	0.1	0.1	0.0	0.0	0.0	1.5

TABLE 7 *(Continued)*

Location	*X-ray*	*Anesthesiology*	*Pathology*	*All Other Clinical*	*Other Clinical Care*
METROPOLITAN REGIONS (Missouri Portion)					
East-West Gateway	0.0	0.0	0.0	0.0	0.1
Mid-America Regional Council	0.1	0.1	0.1	0.0	0.3
Lakes Country	0.0	0.0	—	—	0.0
Mid-Missouri	0.0	0.1	—	0.0	0.1
Mo-Kan Bi-State	0.1	0.1	—	—	0.1
NON-METROPOLITAN REGIONS					
Northwest Missouri	0.0	—	—	—	0.0
Green Hills	—	0.2	—	0.0	0.2
Missouri Valley	—	—	—	—	—
Northeast Missouri	0.8	0.4	0.2	0.7	2.0
Mark Twain	0.0	0.1	0.0	—	0.1
Boonslick	—	—	—	—	—
Ozark Gateway	0.1	0.1	—	—	0.2
Kaysinger Basin	—	0.1	—	0.1	0.2
Show-Me	—	0.1	—	0.0	0.1
South Central Ozark	—	—	—	—	—
Meramec	—	—	—	—	—
Lake of the Ozarks	—	—	—	—	—
Southeast Missouri	0.1	0.1	—	—	0.2
Bootheel	—	—	—	—	—
Ozark Foothills	—	—	—	—	—
Metropolitan total	0.0	0.1	0.0	0.0	0.1
Non-Metropolitan total	0.1	0.1	0.0	0.0	0.1
Missouri total	0.0	0.1	0.0	0.0	0.1

Location	*Total Direct Care*	*Other Clinical Care*	*Total Clinical Care*	*Non-Clinical*	*Unknown and Not Stated*	*Grand Total*
METROPOLITAN REGIONS (Missouri Portion)						
East-West Gateway	0.7	0.1	0.8	0.0	0.0	0.8
Mid-America Regional Council	1.9	0.3	2.2	0.1	0.1	2.3
Lakes Country	1.5	0.0	1.5	0.0	—	1.6
Mid-Missouri	2.0	0.1	2.1	0.1	0.1	2.3
Mo-Kan Bi-State	1.4	0.1	1.5	—	—	1.5
NON-METROPOLITAN REGIONS						
Northwest Missouri	1.4	0.0	1.4	—	—	1.4
Green Hills	2.8	0.2	3.0	—	0.1	3.1
Missouri Valley	2.5	—	2.5	—	—	2.5
Northeast Missouri	11.9	2.0	13.9	1.3	2.2	17.5
Mark Twain	3.4	0.1	3.4	0.1	—	3.5
Boonslick	2.8	—	2.8	—	0.3	3.0
Ozark Gateway	2.5	0.2	2.7	—	0.2	2.9
Kaysinger Basin	1.9	0.2	2.1	—	0.1	2.2
Show-Me	1.9	0.1	2.0	—	—	2.0
South Central Ozark	1.7	—	1.7	—	—	1.7
Meramec	2.1	—	2.1	—	—	2.1
Lake of the Ozarks	1.6	—	1.6	—	0.1	1.7
Southeast Missouri	1.3	0.2	1.5	—	—	1.5
Bootheel	1.5	—	1.5	0.0	—	1.5
Ozark Foothills	1.6	—	1.6	0.0	—	1.6
Metropolitan total	1.2	0.1	1.3	0.0	0.0	1.4
Non-Metropolitan total	2.4	0.1	2.5	0.1	0.1	2.7
Missouri total	1.5	0.1	1.7	0.0	0.1	1.8

physicians are M.D.'s and in Kansas City, four out of every five physicians are M.D.'s. Obviously, the geographic location of the schools of osteopathy have a marked influence on the location of D.O. physicians.

Conclusion

This report provides information regarding the location and type of practice of all physicians in fully licensed, active practice in Missouri. It again demonstrates the previously observed concentration of physicians in urban centers and in communities with medical or osteopathic schools. The greater ratio of physicians to population in urban and training centers is shown to be due entirely to the special concentration of physician specialists in those communities. The rural regions of Missouri have more general or family practitioners in relation to population than the urban regions. Missouri has approximately 15% of its physician population trained in osteopathic medicine. Osteopathic physicians, in contrast to M.D.'s, are more likely to be engaged in general or family practice and, also, are more likely to practice in the rural regions in Missouri.

Other studies have demonstrated that urban ghetto areas also are relatively lacking in physician services. The data of this study did not permit direct analysis of this problem.

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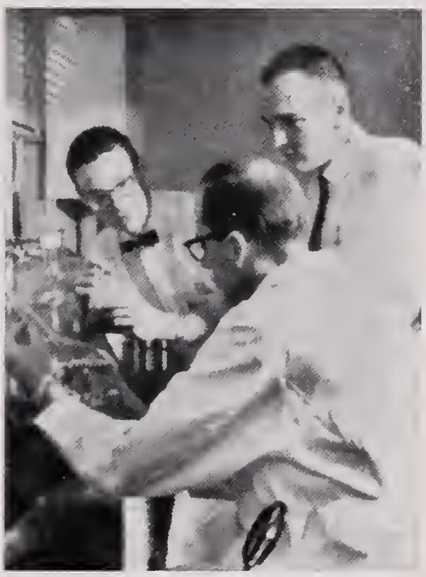

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The Doc's Paradox

By

CHRISTOPHER Y. THOMAS, JR., M.D.

President, Jackson County Medical Society

The following is a transcript of the address which Dr. Thomas delivered as the incoming President of Jackson County Medical Society at the Society's Annual President's Dinner held on Jan. 19, 1971.

FOR ABOUT ONE DECADE now, we Americans, providers and consumers alike, have heard that there is a crisis in national health care. Public and private programs have spent millions of dollars trying to define the problem and offer solutions. In spite of these efforts, it would appear that the basic death rate, which held steady for over one-half century, now appears to be worsening. Mortality rates have risen for all ages between 15 and 74, and improvement has been registered in only the very young and the very old. If a massive transfusion of billions of dollars has not materially altered the health of the American people, as measured by the death rate, how can additional dollars be expected to improve the situation?

The primary reasons for the initial decrease and the recent uptrend in mortality rates are (1) the near-conquest of diseases of infectious origin and (2) the recent upward trend in death rates from major chronic disease, including heart disease, cancer and diabetes, and from accidents and other violence. For young men ages 15 to 24, motor vehicle accidents accounted for most of the upturn; suicide and homicide came next.[1] More money provided for more people to see more doctors who are better trained has not yielded better results.

Let us try to examine the background of what would appear to be a paradox. The first essential might be to examine the present-day-physician—the man, his training, his methods. Early in life, this young man became motivated by a strong desire to help people and decided to become a physician. The road ahead was severely competitive and he knew that only one third of the premedical students would ultimately be admitted to medical school. He was well aware that his grade point average would have to be in the A– to B+ area and that doing poorly in any one of the many subjects would, in all likelihood, eliminate him from consideration.

There is little reason to question the motivation of a student who has successfully completed a premedical education with a grade point average that qualifies him for admission to medical school. It remains now only to conduct personal interviews to eliminate those who for other personal or financial reasons might not survive the rigors of medical school itself. The competitive aspect has frequently be criticized, but those who believe in it feel that competition sharpens the wit, whets the appetite and gives a greater sense of fulfillment once the objective is achieved.

Our young man now proceeds through his medical school curriculum and emerges as a health professional. I will not belabor the details of the medical school curriculum, but I will examine the end product. Whether he now chooses to serve an internship and enter general practice or whether he chooses to pursue a three-to-five year residency in a specialty, he emerges as a professional who stands as the ultimate source of technical knowledge and authority in his field. The bulk of his education has been scientific—not only from learning a massive amount of scientific facts, but also being indoctrinated in the use of the scientific method of thinking.

Much of the medical man's activity can be represented by the process of differential diagnosis, whereby a succession of diagnoses in the form of hypotheses is tested against the available signs and symptoms. Rationality is as significant an attribute of the physician now as it was in the days of Hippocrates. The rationality is particularized and technical—a method of sorting the enormous mass of concrete detail perceived as so overwhelming in medical school. Clinical rationality is not a tool for the exploration or discovery of general principles, as rationality is in science, but a tool for sorting the interconnection of perceived and hypothesized facts. "Principles" are generated in the course of clinical practice, but they are generalizations from personal and, therefore, systematically-biased experience.[2]

The physician is both scientist and practitioner. The practitioner side may have a different view of his work from the scientist; in fact, perhaps a different way of thinking about the world.

First, the aim of the practitioner is not *only* knowledge but action. Successful action is to be preferred, but even action with very little chance of success is to be preferred to no action at all. There may even be a tendency to take action for its own sake on the assumption that doing something is better than doing nothing. He acts to correct lethal shock while simultaneously attempting to determine the cause. Toxicity with fever is attacked vigorously even though the source and type or organism is yet to be discovered. Pain is relieved while its underlying cause is being studied.

Second, the practitioner must believe in what he is doing in order to practice, to believe in what he does results in good rather than harm and that what he does makes the difference between success and failure rather than no difference at all. He will tend to believe that practical action is preferred to skeptical detachment—the old quote of "don't just stand there, do something."

Third, being a pragmatist, the practitioner is prone to rely upon apparent "results" for his guide rather than on theory, and he is prone to "tinker" if he does not seem to be getting results by conventional means.

Fourth, the clinician is prone to trust his *own* accumulation of personal, firsthand experience more than abstract principles or "book knowledge" of the classroom variety.

Finally, the practitioner is more likely to emphasize the idea of relativity and probability than the idea of regularity and lawful behavior. This is part of the art of medicine, since disease seldom follows precise and absolute patterns.

In his commitment to action, his faith, his pragmatism, his subjectivism and his emphasis on relativity, the practitioner side is quite different from the scientist side. In emergencies, the practitioner cannot wait for all of the evidence. In any point of historical time, he cannot wait for the scientific discoveries of the future. Dealing with individual cases, he cannot rely entirely on general concepts or principles; he must also rely on his own senses.

In assuming responsibility for the practical action he takes, he also assumes a degree of vulnerability, for while he may gain the gratitude due the miracle worker, he also may gain the reproach due the man who fails to work expected miracles. Professional authority, like political or economic power, teeters between glory and ruin and claims its glory because of its risk of ruin.[3]

The nature of the work of this professional practitioner is the attempted solution of concrete problems of individual patients. He is characteristically oriented to applying science rather than creating or contributing to it. Medical practice is oriented toward intervention, irrespective of the existence of adequate and reliable knowledge. He must predict with the facts at hand what the anticipated flow of disease will be and proceed in an attempt to interrupt it. The characteristics of a physician's training tend to encourage emphasis on personal rather than communal responsibility. This tends to support individual, but not collective, efforts at regulation and places emphasis on the primacy of firsthand clinical experience rather than scientific laws or general rules.

While he must act to protect his own individual patients from harm, the practitioner's emphasis on variability and probability makes him despair at the thought of trying to protect all of society.

With this background view of the practitioner, we must view the consequences of thrusting him into the whirlwind of recent social changes. Here, now, is a man who has been given the tools for scientific problem-solving and whose profession has indoctrinated him in the values of competence, dedication to his work and professional integrity. He now has thrust upon him a new phrase, "comprehensive medical care," which speaks of a continuous spectrum of needs and services from health education to long term care of the incurable. A man who has been trained in the treatment of the acute illness and whose expertise includes radiation, antitumor drugs, heart-lung machines, mechanical respirators, elaborate diagnostic tests and techniques, incubators and a multitude of mon-

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T_3 (Resin)	Less than 25%	27-35%
T_3 (Red Cell)	Less than 11%	11.5-18%
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Precautions: As with other thyroid preparations, an overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction. **Side effects:** The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction of dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) for Injection may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

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itoring devices is suddenly being asked to consider the social aspects of disease and death. That health, like happiness, may be dependent upon the individual's morale, sense of purpose and maintenance of a consistent life-style is something the physician is just beginning to comprehend. It is a shattering experience.

Physicians, no less than lawyers and ministers, are prone to believe that their work experience equips them uniquely to understand life and human nature. He may well display this attitude when asked to participate on consumer-dominated health planning boards. The laymen on these boards respectfully receive the physician's opinion as fact, but the laymen cannot discriminate between those that are based on training, skill and experience and those that are not. After a few chases up blind alleys and following a general lack of progress, it suddenly dawns upon the entire group that no one has the necessary expertise and experience to define the problem. No one can ask the proper questions. No one man knows the answers. This may result in anger and frustration. The laymen tend to blame the physician while the physician considers it a waste of time. Why is it that the leaders of a community, laymen and physicians alike, seem to make little progress in health planning?

While many of the discoveries in medicine *permit* a social change, the average physician has never considered himself to be an active part of the change. He has been concerned with the prevention and therapy of the *consequences* of social change such as the relationship between diet and heart disease and the relationship between smoking and lung cancer. The physician has felt that an *active* role in trying to mold social change is distracting and destructive to his basic purpose.

While our whole social system must recognize the need for adaptation, private medicine should react to create a new man for the new times. The need might best be met by a new specialty—the specialty of community medicine.[4] In addition to the present medical school curriculum now offered, this man should have training in epidemiology, statistics, management, administration and medical sociology. He would be a scientist and a social worker ready to cooperate in team work with the people, a friend and leader directing all of his efforts toward prevention and becoming a therapist when prevention breaks down. His job would be identifying health needs, evaluating performance, advising the community of health needs and services and knitting together the multiple professional disciplines for effective performance.

He could be the head of a new health board comprised of a local health council, a local multidiscipline professional consultative committee and a medical school liaison committee. Perhaps only in this way can coordination of medical knowledge lead to effective and efficient application.

The specialist in community medicine would direct important educational programs aimed at the long-neglected, all-important enemy of health—consumer life-style. Society itself must be educated as to its own role in health maintenance. The health board should educate those who already have concern for their own health and, especially, the young before they have acquired any life-long, health-threatening habits.[5]

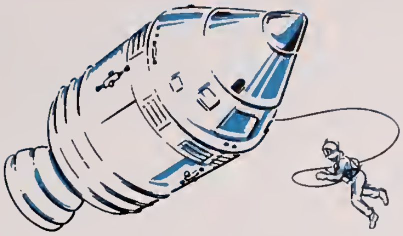
This is not *reform*, but adaptation to social change by our present system. Freedom is the recognition of necessity. Recognition and definition of present day health necessities would allow all of us the freedom to pursue other goals. I believe that private medicine can act responsibly in this regard. Much thought should be given to finding the best method, and I have suggested the above as one possibility.

Yet, there are those who are bent upon reform of the entire system. Both the action of maintaining the status quo or the reaction of reform movement can produce evils. Or to put it another way, there is no guarantee in reform.

If in recognizing the need for adaptation or change we are made to feel guilty by those who are preaching reform, then we are trapped. We have bitten on a hidden hook. This is the "double-bind," as described by Bateson. The "double-bind" is an overt or social message with a covert or hidden meaning. Examples are (1) If you *don't* do what we ask, we will openly condemn you as irresponsible (If you *do* act as we suggest, we will secretly condemn you as a simpleton.); (2) If you *don't* set up peer review organizations, we will suspect that you are hiding something (If you *do* set up peer review organizations, it will confirm our suspicions.).[6] This method of conjuring up a guilty conscience can be used by skillful politicians and ambitious leaders to extend their control—often beyond legal limits. The problem lies only in not recognizing it.

I have tried to sketch in the background of what would appear to be, in the eyes of most laymen, a professional paradox. A paradox that becomes intelligible not as a deep conspiracy

(*Continued on page 294*)



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The Administration has notified the American Medical Association that it is "prepared to review thoroughly the regulations governing the medical profession" in the Phase 3 controls that continue the limits on physicians' fee increases.

The Administration's letter avoided a direct reply to the AMA's petition of January 15 to President Nixon urging that physicians be exempted from the Phase 3 controls as has been most of the rest of the economy.

John Dunlop, director of the Cost of Living Council, said the President had asked him to respond to the AMA letter. Dunlop said, "Having assumed responsibility for the economic stabilization program last month, I am now prepared to review thoroughly the regulations governing the medical profession."

"As you know," wrote Dunlop to John R. Kernodle, M.D., Chairman of the AMA Board of Trustees, "the health field has been persistently among the most inflationary areas in our economy, and I am sure it is our goal to alter that trend."

The AMA had told the President that physicians' fees rose only 1.7% during the first 12 months of Phase 2. ". . . we have surpassed the original expectations," said Dr. Kernodle in the AMA letter to the President. "In view of our demonstrated success during the past year, you can imagine our dismay . . . that the medical profession has once again been singled out under special controls."

Dunlop's letter did not mention the AMA's request for a meeting with President Nixon and his top economic advisers to discuss the issue.

In his letter to Dr. Kernodle, Dunlop said: "We are presently in the process of appointing members to the new Health Industry Advisory Committee and I assure you that the views of physicians will be represented on that committee. As soon as an executive director for the committee is named, I will have him contact you for suggestions on how best to meet our goals for controlling health care costs under Phase 3.

"Meanwhile, I know the federal government can count on your cooperation in following the legal requirements now in effect, and I look forward to working with you to evaluate new alternatives."

* * *

It appears likely that Congress this year will pass legislation to improve emergency medical services throughout the nation. Both the Senate and the House have opened hearings on several bills that would provide federal funds to assist local governments in improving ambulance and emergency room services.

Among the major bills addressing themselves to emergency medical care is one developed by the AMA. Sponsored by Senator J. Glenn Beall (R.-Md.) and by Representative James Hastings (R.-N. Y.), the AMA bills (S. 654 and H. R. 4952) provide for the establishment of a comprehensive emergency medical system across the nation. Direction and financial assistance would be at the federal level, however the programs would be developed at the community level.

In outlining the AMA bill before a subcommittee of the House, Roy M. Baker, M.D., Jacksonville, Fla., summed up the extent of the problem by excerpting certain statistics from a recent report published by the National Research Council.

> "Accidental injury and acute illness generate a staggering demand on ambulance and rescue services, allied health personnel, physicians, and hospitals for the delivery of emergency medical services. Accidental injury is the leading cause of death among all persons aged 1 to 38. Each year more than 52 million U. S. citizens are injured, of whom more than 110,000 die, 11 million require bed care for a day or more, and 400,000 suffer lasting disability at a cost of nearly $3 billion in medical fees and hospital expenses and over $7 billion in lost wages. Those requiring hospitalization occupy an average of 65,000 beds for 22 million bed-days under the care of 88,000 hospital personnel. This hospital load is equivalent to 130 500-bed hospitals. Of the more than 700,000 deaths from heart disease each year, the majority are due to acute myocardial infarction and more than half of these deaths occur before reaching a hospital. Ap-

proximately 40 million persons seek care each year in hospital emergency departments as a result of accidents, heart disease, stroke, poisoning, diabetic coma, convulsive disorders, and many other illnesses."

In his testimony, Dr. Baker noted as a matter of interest for the Committee, there are currently seven two-year emergency residency programs in operation. Beginning on July 1, 1973, there will be an additional seven residency programs operational. In addition, there are three institutions conducting short-course training programs in the field of emergency medicine.

* * *

The use of human subjects in medical research is essential for the benefit of society despite the fact that it will place some participants at a calculated disadvantage, the American Medical Association told Congress.

The AMA comments were made to Senator Kennedy's Senate health subcommittee in hearings on the subject of human experimentation and if a need exists for federal legislation to forestall abuses.

William R. Barclay, M.D., Assistant Vice-President of the AMA, told the senators that "The practice of medicine is both an art and a science, and we are constantly seeking new means to improve the quality and length of life. The evolution of sound medical practice through the years has reduced the incidence of pain and has done much to advance the cause of human dignity. These procedures, however, today as always, require the weighing of risk against benefit at every level of professional discretion. It is evident that there is a certain degree of risk attendant to any medical procedure.

"But if we are to continue to improve our high standards of patient care, we must maintain our initiatives in biomedical research. The accomplishments of modern medical practice testify to the merits of continued research. Such advances are hard won, but the benefits are beyond question.

"Medicine as a science must conduct experimentation if it is to progress rather than stagnate. Experimentation is an essential principle of all sciences, be they biological or physical. Scientific experiments are conducted both to test new hypotheses and to reexamine the validity of accepted hypotheses.

"A medical experiment with human subjects is sometimes referred to as a clinical trial. As such, it should be a test of a reasonable hypothesis based on sound laboratory data. It should not be a random groping for information. A well designed clinical trial has elements in its design which assure that it will be a useful and a justifiable undertaking.

". . . A human experiment, by its very nature, establishes a set of circumstances which will place some of the participants at a calculated disadvantage. Generally a trial is established to answer the question, 'Is treatment A better than treatment B?' No definitive answer to this question can be obtained until the test is conducted over an adequate period of time and sufficient data has been gathered by which to measure the relative response of the subject.

". . . Through the process of clinical investigation, which we have described here, drugs and procedures become available for widespread usage in patient care.

". . . We note that it is the Committee's hope that these hearings will encourage continued support of an advancement of biomedical research. If we are to continue to increase our knowledge and continue to improve medical care for the benefit of society, medical research using human subjects is essential," Dr. Barclay concluded.

The Doc's Paradox

(Continued from page 292D)

against the public, but as a "natural" outcome of well-intentioned, highly-trained people with a special perspective on themselves, their patients and their profession. The fact that it involves good intentions rather than a conspiracy makes it a difficult problem for social policy to cope with. We have tried to explain conversely why it is difficult for the individual physician to cope with social policy. Insofar as many of the components of our profession—the assumption of personal responsibility, integrity and self-regulation, for example—are positively valued by our society, the problem for social policy is to avoid destroying what is valuable in the course of changing what is unsatisfactory.

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medical melange

Notes of interest from Here .... and There

Dr. John C. Murphy, University City, has been appointed acting Commissioner of Health of St. Louis County succeeding **Dr. C. Howe Eller**, who has retired. Dr. Murphy has been assistant health commissioner since 1959. Since joining the St. Louis County Health Department in 1950, he has served as director of tuberculosis control and director of chronic disease control. He previously served with the Veterans Administration and in the chest clinic of the County Health Department while he engaged part time in private practice. He is a member of the medical staff of St. Louis University and St. Mary's Health Center.

Clarence C. Cohrs, M.D., Moberly, was elected president of the **Missouri State Allergy Association** at the organization's annual meeting in St. Louis recently. Other officers elected were **Drs. Jean Chapman**, Cape Girardeau, president-elect, and **Donald V. Youll**, Kansas City, secretary-treasurer. **Drs. Stanley Goldman**, Kansas City; **Clement Sullivan**, St. Louis; and **Orval Withers**, Kansas City, were named to the Board of Directors.

William H. McAlister, M.D., St. Louis, was elected president-elect of the **Missouri Radiological Society** at a recent meeting in St. Louis. **Byron Watts**, M.D., Jefferson City, will serve as president for the coming year and **Ronald G. Evens**, M.D., will serve a second term as secretary-treasurer. A scientific meeting was held in conjunction with the business meeting.

The **Missouri State Surgical Society** held its election of officers in St. Louis in April. **Dr. Arthur Bane**, St. Louis, was elected incoming president and **Dr. Howard Linville**, Kansas City, was elected president-elect. **Dr. Hugh E. Stephenson, Jr.**, Columbia, is immediate past-president of the Society.

Dr. William M. Hart, chairman of the Department of Ophthalmology of the University of Missouri-Columbia, has been elected to fellowship in the Royal Society of Medicine in London. Dr. Hart founded the Eye Research Foundation of Bethesda, Md. and was a clinical professor of ophthalmology at the University of Maryland before he returned to the UMC School of Medicine to head the eye clinics and Ophthalmology Department at the Medical Center.

Dr. John Owens, Sedalia, was presented a plaque by the Sedalia-Pettis County United Way board of directors in recognition of his service as campaign chairman for the 1972-1973 United Fund campaign.

Dr. James C. Cope Named MSMA President-Elect

James C. Cope, M.D.

James C. Cope, M.D., Columbia, was elected President-Elect of the Missouri State Medical Association on April 1 at the final meeting of the House of Delegates during the 115th Annual Session in St. Louis.

Dr. E. A. Stricker, St. James, was installed as President of the Association at the session.

Dr. Cope is a Past-President of the Boone County Medical Society and has served several terms as MSMF Fifth District Councilor. He is the Immediate Past-Chairman of the Council.

He is active on the staff of the Boone County Hospital, is Associate Clinical Professor of Urological Surgery at the University of Missouri School of Medicine and is a urology consultant at the Ellis Fischel State Cancer Hospital.

Dr. Cope has long been involved in organized medicine and is a member of the Missouri Federation of Urologists, the American Urological Association and the American Medical Association. He has had scientific papers published in *The American Journal of Urology;* MISSOURI MEDICINE, the Journal of the Missouri State Medical Association; *Medical Economics;* and *The Rotarian.*

Dr. Cope received his undergraduate training at William Jewell College, his M.D. degree at New York University and his B.S. and M.A. degrees at the University of Missouri.

His hobbies include photography, woodworking and wine-making.

Dr. and Mrs. Cope reside in Rocheport and are the parents of three daughters.

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of serious blood disorders. CBC and urinalysis
careful microscopic examination should be perfo
frequently.
Precautions: Use cautiously in patients with imp
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methemoglobinemia; *Allergic reactions:* Eryt
multiforme (Stevens-Johnson syndrome), genera
skin eruptions, epidermal necrolysis, urticaria, s
sickness, pruritus, exfoliative dermatitis, anaph
toid reactions, periorbital edema, conjunctival
scleral injection, photosensitization, arthralgia a
lergic myocarditis; *Gastrointestinal reactions:* Na
emesis, abdominal pains, hepatitis, diarrhea,
rexia, pancreatitis and stomatitis; *C.N.S. reac*
Headache, peripheral neuritis, mental depres
convulsions, ataxia, hallucinations, tinnitus, v
and insomnia; *Miscellaneous reactions:* Drug
chills and toxic nephrosis with oliguria and a
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*Koch-Weser, J., *et al.*: *Arch. Intern. Med.*, *128* 399, 1971.

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MSMA Woman's Auxiliary Elects Mrs. Charles R. Willman

Mrs. Charles R. Willman, St. Joseph, was elected President of the Woman's Auxiliary to the Missouri State Medical Association at the annual meeting at the Chase-Park Plaza Hotel in St. Louis on March 29-31.

Other Woman's Auxiliary officers elected for 1973-1974 are Mrs. George J. Lytton, Kansas City, President-Elect; Mrs. William R. McPhee, Kansas City, First Vice-President; Mrs. Ned B. Chase, Joplin, Second Vice-President; Mrs. George P. Wilson, Columbia, Third Vice-President; Mrs. Robert Stewart, Sedalia, Fourth Vice-President; Mrs. Thomas Thale, Ballwin, Recording Secretary; Mrs. Harry E. Raybuck, St. Louis, Treasurer; Mrs. L. O. Muench, Washington, Auditor; Mrs. Clem DuMont, St. Joseph, Corresponding Secretary; and Mrs. E. F. Butler, St. Joseph, Parliamentarian.

Mrs. Willman, whose monthly messages to members of the MSMA will appear regularly in Missouri Medicine, is a Past-President of the Buchanan County Medical Auxiliary. She served as President-Elect of the MSMA Woman's Auxiliary in 1972-1973 and as a Vice-President the previous year. She also has served as Recording Secretary (two years), Chairman of the Missouri Auxiliary's AMA-Educational Research Foundation (two years) and Radio-TV Chairman.

Mrs. Willman's participation in community affairs includes membership in the St. Joseph Hospital Guild and Methodist Hospital Association, for which she was treasurer for three years and is now serving as first vice-president. She also has served as president of the Women's Missionary League at St. Paul Lutheran Church and is on the Public Health Nursing Board, the Midland Empire Girl Scout Council Board and is a member of the Junior League.

Mrs. Willman is a graduate of Valparaiso University and Deaconess Hospital School of Nursing in St. Louis with a bachelor of science degree in nursing.

Dr. and Mrs. Willman have lived in St. Joseph since 1959. Dr. Willman, a surgeon, is a member of the Missouri Medicine Editorial Board. They are the parents of four daughters.

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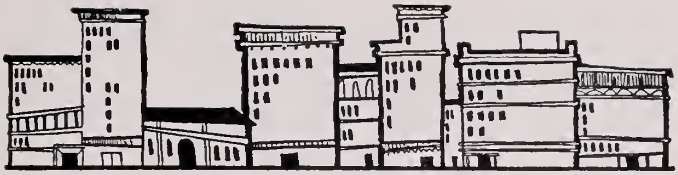

WASHINGTON UNIVERSITY

Dr. David M. Kipnis, professor of medicine at the School of Medicine, spoke at a two-day symposium in Birmingham recently to dedicate the new Diabetes Research Institute at the University of Alabama-Birmingham Medical School. A well-known specialist in metabolic disorders, Dr. Kipnis pinpointed genetic engineering as a possible future cure for such medical problems as diabetes.

Dr. Kipnis said that much more research should go into the field of metabolic disorders, because "it holds a challenge for the future with exciting new ways to go." He said that genetic engineering is no longer science fiction and may hold the key to curing diabetes.

Dr. Herman N. Eisen has been appointed professor of immunology in the Department of Biology and a senior researcher at the newly-formed Center for Cancer Research at the Massachusetts Institute of Technology. Dr. Eisen has been professor and head of the Department of Microbiology at Washington University School of Medicine since 1961. Prior to 1961, he was professor of dermatology at Washington University, associate professor of industrial medicine at New York University and research associate in immunochemistry at the Sloan-Kettering Institute.

ST. LOUIS UNIVERSITY

Rev. Edward J. Drummond, S.J., vice-president for the St. Louis University Medical Center, joined administrators from DePaul Community Health Center and St. Vincent's Hospital Division of DePaul Community Health Center in the signing of contracts which established a joint medical education program in obstetrics between the institutions.

The affiliation was initiated last July when St. Louis University began sending its obstetrical patients to DePaul for hospitalization. *Anthony L. Bunker,* executive director of DePaul Community Health Center and one of the signers of the contract, said he believes the agreement "will be the first step in developing medical affiliation programs between the two facilities in other major services as well."

Father Drummond said the University and the hospital "through cooperative efforts, will be able to provide obstetrical service to more people in a more efficient manner." Under terms of the contract, the University provides a full-time faculty member as director of medical education for obstetrics at DePaul. He is *Dr. Ralph Woods,* associate professor of Gynecology and Obstetrics at the University's School of Medicine.

Joseph E. Lynch has been appointed assistant vice-president for Business and Fiscal Affairs at the St. Louis University Medical Center. He has been director of Business and Finance at the Medical Center since 1968. During this period, his main areas of responsibilities have been the formulation of budgetary and financial policies and plans for all operating units of the Medical Center. These have included the School of Medicine, School of Nursing, St. Louis University Hospitals and Departments of Orthodontics and Hospital and Health Care Administration. Mr. Lynch's offices are on the administrative floor of the School of Medicine.

Dr. Edward T. Auer, Samuel W. Fordyce Professor of psychiatry and chairman of the Department at the St. Louis University School of Medicine, has been named a Charter Fellow of the American College of Psychoanalysts. Fellowship in the College is awarded in recognition of contributions in psychiatry and psychoanalysis and national stature in the field and the great esteem of friends and colleagues.

Dr. Theodore A. Cooper, director of the National Heart and Lung Institute, will deliver a commencement address before the 1973 medical graduates at Senior Class Day Ceremonies to be held in Powell Symphony Hall on May 29. Dr. Cooper received both the M.D. and Ph.D. degrees from St. Louis University.

Dr. Rodney Coe, professor of community medicine, has been elected secretary of the Gerontological Society, a national organization of teachers, researchers and practitioners interested in the field of aging. His term is for a three-year period expiring in November, 1975.

UNIVERSITY OF MISSOURI-COLUMBIA

Dr. Ruby Potter, associate dean of the University School of Medicine in charge of the School of Nursing, was honored at an open house at the School of Nursing and at a reception banquet at the Memorial Union on March 31. She will retire in September.

A program entitled, "This Is Your Deanship," depicted various periods of Dr. Potter's life including her early life, her nursing education and her nursing career. Members of her family and friends from these periods participated in the program.

An oil painting of Dr. Potter, commissioned by alumni, faculty and friends, was presented to University Chancellor *Herbert Schooling* to be hung in the library of the School of Medicine.

J. Kenyon Taylor, Columbia, a second-year University medical student, received the Student Research Award at a meeting of the Southern Society for Clinical Research and the America Federation for Clinical Research in New Orleans. Kenyon's research was on experimenta kidney disease in the mouse.

Research on the venom of the poisonou brown recluse spider at the University of Missouri Medical Center under the direction o *Professor James T. Barrett* and *Professor Benedict J. Campbell* of the Departments of Microbiology and Biochemistry is the subject of tw reports at national meetings. In each instance local scientists will describe special aspects o the progress made on their portion of a larg scale program supported by a National Institutes of Health research grant.

At the first meeting on April 15-20, *Mr. Klau Elgert,* a Ph.D. candidate in the Department o Microbiology, described before an assembly o the American Association of Immunologist how he has produced a radioactive spider venom. Another Ph.D. candidate in the Departmen of Microbiology, *James Finke* of Joplin, wil present a research report to the American Society for Microbiologists at the annual meetin on May 6-11 in Miami Beach.

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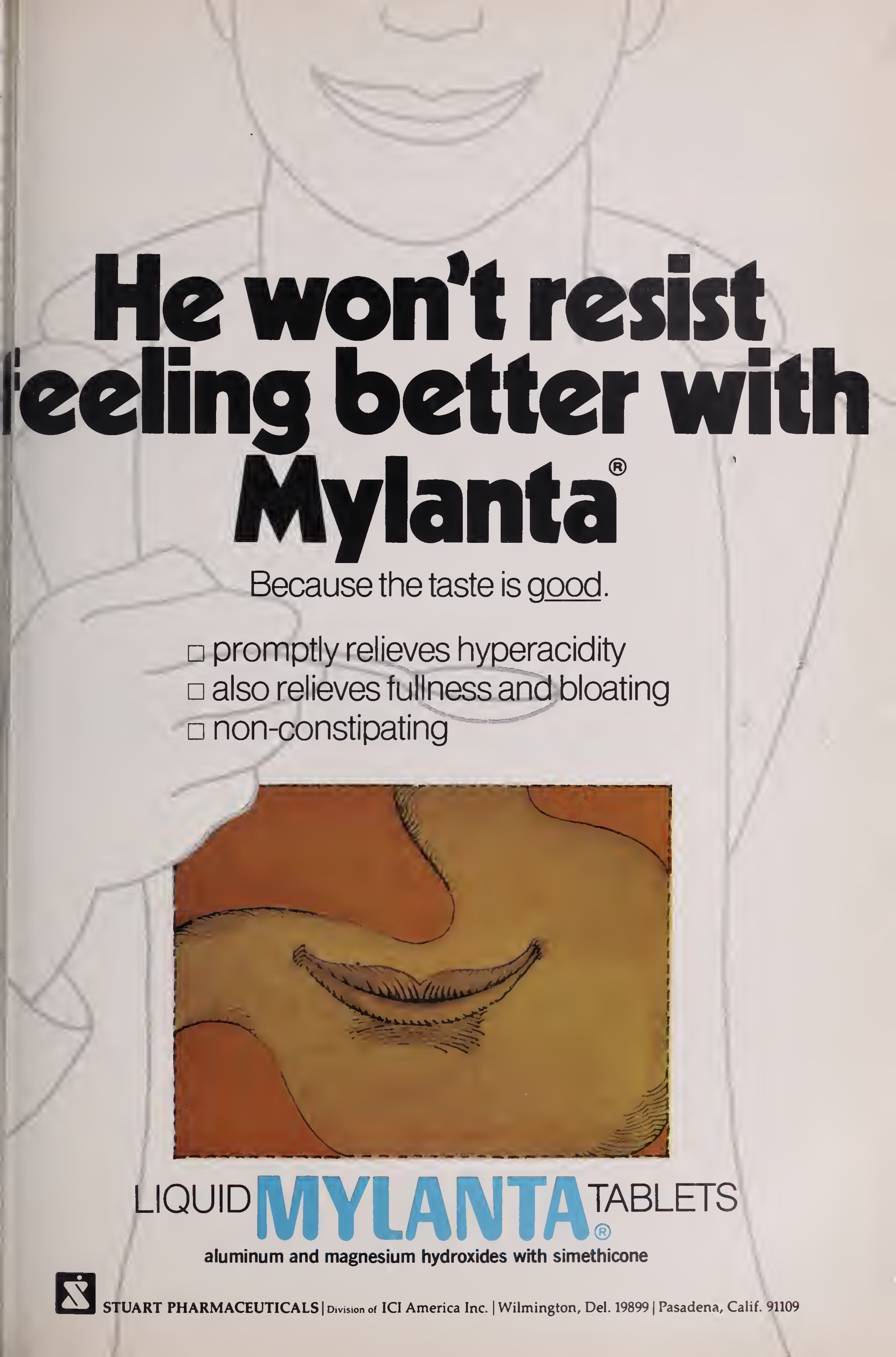

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Warnings: Patients with severe cardiac disease should be given this medication with caution.

Fever and possibly heat stroke may occur due to anhidrosis.

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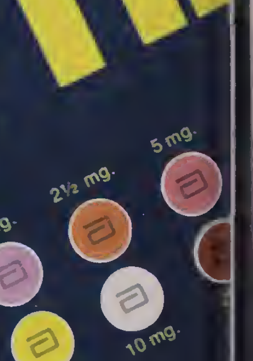
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in Brief

A summary of AMA, medical & health news

American Medical Association/535 North Dearborn Street/Chicago, Illinois 60610/Phone (312) 527-1500/TWX 910-221-0300

The AMA Annual Convention will have a new schedule this June in New York City. It will open Saturday, June 23, a day when most physicians are not in their offices and will be able to attend postgraduate courses and exhibits. The regular scientific sessions will open Sunday at 9 AM and end Wednesday, June 27, at 5 PM. On Thursday, June 28, all physicians will be free to attend the House of Delegates meeting without program conflict.

A **television series** titled "Today's Health" is now in production. The half-hour programs will be produced for syndication by Gittelman Film Associates in association with the AMA magazine *Today's Health*. Material from the magazine will be used on the programs. AMA President C. A. Hoffman, M.D., said, "Much of the health information directed at the public today is of questionable validity. *Today's Health* will present accurate information in an entertaining manner and we at the AMA are happy to be able to participate in such a venture."

Project USA, the AMA's program to provide volunteer physicians as short-term replacements for National Health Service Corps physicians in areas with critical medical shortages, has received 600 requests for information. Twenty-one physicians have been cleared through civil service and are ready for assignment, and 25 others are in the process of being cleared. Direct inquiries to Project USA, AMA Headquarters.

AMA specialty journals will continue as a benefit of membership, the Board of Trustees voted. The journals were scheduled to be distributed on a subscription basis beginning in July. The Board's action was taken in response to the views of the membership and as a result of a management reappraisal of the financial situation of the journals. Members will also receive *Prism*, the AMA's new socioeconomic journal.

Medicare investigative reports completed after Jan. 31 will be made public, the Social Security Administration announced. They include reports on deficiencies in institutions, home health agencies and independent laboratories, as well as evaluations of carriers, intermediaries, state agencies and providers. The names of physicians found to have furnished excessive services will be released only "after consultation with a professional medical association" or a state medical authority and after the physician has had an opportunity to offer evidence. These points on physicians were not contained in the regulation when it was proposed last September. They apparently were added in response to criticism from the AMA and others.

The AMA House of Delegates last November urged state medical society representatives to utilize the "guidance and assistance" of the AMA's Washington Office when visiting members of Congress. Services include a briefing on health-related bills, activities of the executive branch and AMA legislative proposals. The Washington Office was utilized by representatives from 31 state medical associations last year. Contact AMA Field Offices to arrange for services.

Available from AMA: A new edition of *Medicolegal Forms with Legal Analysis*. Write Order Dept., Reference No. OP-109, AMA Headquarters. For *AMA Guidelines for Physicians in Their Relations with the Communications Media*, write to Dept. of Medical Ethics, AMA Headquarters. For *Computers and Medicine*, a bimonthly newsletter, $5 a year, write to Subscription Services, AMA Headquarters.

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Volume 70, Number 5—May, 1973

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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LELAND M. LAYCOB, M.D., EDUARDO GARIN, M.D. *and*
WILLIAM D. LERNER, M.D., *Columbia*

Rocky Mountain Spotted Fever in Children

Case Reports

Rocky Mountain Spotted Fever (RMSF) is a tick-borne infection caused by Rickettsia rickettsii, an intracellular microorganism usually classified in an intermediate position between bacteria and viruses. After its identification in 1911, the number of reported cases in this country rose steadily from 1920 to the late 1940s and then began to decline coincident with, but not necessarily secondary to, the increased use of broad spectrum antibiotics.[1] Before 1940, most cases, as the name would indicate, were reported from the Rocky Mountain area. During the past ten years, the number of cases, which has again increased to 300 to 500 per year, were reported mostly from the southeast states and are predominantly in children.[2] There were only five reported cases in the state of Missouri in 1971.[3]

During the month of August, 1972, there were two cases of RMSF referred to the pediatric service of the University of Missouri Medical Center from South Central Missouri with the diagnosis of fever of unknown origin. This paper points out the classic as well as recently-recognized features of this illness with the hope that physicians can more readily identify this potentially fatal infectious disease.

Case Reports

Case # 1. A 16-month-old white boy was referred to our service on Aug. 20, 1972 with a generalized petechial rash and fever of unknown origin. The child's illness began two weeks prior to admission with onset of fever and an erythematous macular rash which the parents first observed on the cheeks and abdomen. It soon became more intense over the extremities.

After one week of intermittent temperature, the patient was taken to his personal physician. The diagnosis of "Strep infection" was made. The patient was given an intramuscular injection of penicillin and was continued on a regimen of ampicillin administered orally. Over the next few days, the child remained febrile and the rash became more discrete

Rocky Mountain spotted fever, a tick-borne rickettsial infection, is infrequently reported in the state of Missouri. This disease should be kept in mind when the physician is dealing with fever of unknown origin associated with a rash. To aid in the diagnosis, special attention should be paid to inquiring about the patient's exposure to ticks, evolution of the rash, the systems involved and laboratory tests. Dr. Laycob is Chief Resident and Dr. Eduardo Garin is a first-year Resident in the Department of Pediatrics at the University of Missouri Medical Center. Formerly Assistant Professor in the Department of Internal Medicine, Section of Immunology, Rheumatology and Infectious Disease at the Medical Center, Dr. Lerner is now on the staff of E. J. Meyer Memorial Hospital, Buffalo, N. Y.

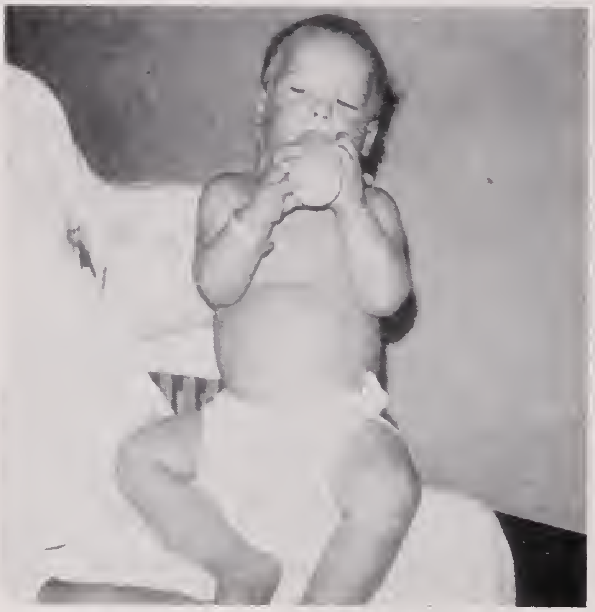

Fig. 1 Case Report # 1: Generalized petechial rash, more intense on the extremities. Note edema of the upper eyelids.

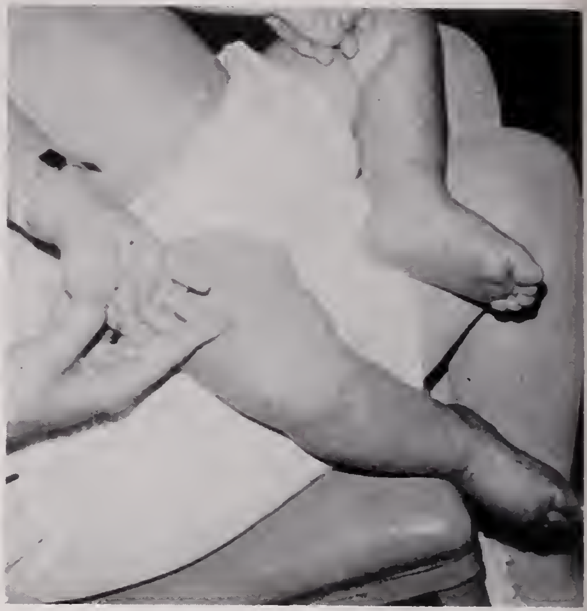

Fig. 2 Case Report # 1: Rash of palms and soles and edema of the feet.

and darker. The patient, with a temperature of 105 F, was seen again by a physician on August 20, given oral doses of erythromycin and referred to UMMC. In addition to the above information, it was noted in the admission history that the patient visited his aunt's house in Rolla two days before the onset of this illness. The aunt owned two dogs from whom ticks were periodically removed.

The patient had had no illnesses during infancy prior to the onset of the present illness. He had not received any immunizations. His growth and development were within normal limits (WNL).

Physical examination revealed a well nourished infant with a rectal temperature of 105 F; pulse rate, 148 beats per minute; respiration rate, 46 per minute; weight, 12 Kg. A generalized petechial rash was present (Figs. 1 & 2). It was more intense on the extremities, which involved the palms and soles, and did not blanch on pressure. There were ecchymoses over both elbows. The patient had facial edema, injected conjunctivae and a croupy cough. The chest was clear and there were no heart murmurs. The liver was palpable 3 cm below the right costal margin. The spleen was not enlarged. A neurologic examination was within normal limits and there were no meningeal signs on admission.

Laboratory studies revealed the following values: hemoglobin, 6.8 gm/100 ml; hematocrit reading, 19%, white blood cell count (WBC) 8,700/cu mm with 66% neutrophils, 30% lymphocytes, 3% monocytes, 1% eosinophils; platelet count, 36,000/cu mm; and reticulocyte count, 0.3%. Blood urea nitrogen and electrolytes were WNL. The urinalysis was negative except for occult blood. Chest x-ray was WNL. A bone marrow aspiration performed on the first hospital day showed normal morphology, including megakaryocytes. Direct Coombs test was negative. A mononucleosis spot test was negative. Prothrombin time and partial thromboplastin time were WNL. Fibrinogen level was quantitatively below normal. Fibrin split products were not found. On the second day, serology reported positive dilutions of Proteus OX-2 1:320 and OX-19 1:320.

On the basis of the clinical findings and the presumptive laboratory tests, the patient was felt to have Rocky Mountain spotted fever. After blood was drawn for an acute phase complement fixation test for RMSF, he was given 60 mg/Kg day of chloramphenicol in four divided oral doses.

On the third day, several observers felt that the patient had signs of meningeal irritation. A lumbar puncture was performed and showed a red blood cell count (RBC) of 1/cu mm and a WBC of 45/cu mm with 78% PMNS and 22% lymphocytes. The cerebrospinal fluid (CSF) protein was 56 mg/100 ml and CSF glucose was 59 mg/100 ml. A smear showed no pathogens and a culture grew no organisms.

Hospital Course: After the initiation of therapy, the patient's temperature returned slowly to the normal range over the next 48 hours. There also was an abrupt rise in hemoglobin, hematocrit reading, reticulocyte count and platelet count. The antibiotic was continued until the patient remained afebrile for seven days. By this time, the rash was clearing, the croupy cough had resolved and there was no longer any evidence of meningeal irritation. After discharge, a convalescent phase complement fixation titer was drawn by the referring doctor and reported by the State Division of Health in Jefferson City, Missouri as positive for RMSF at a 1:256 dilution. (The acute phase titer was less than 1:8.)

Case # 2. The patient was a 13-year-old white boy who, 12 days prior to admission at UMMC, developed fever to 105 F. This was followed four days later by a rash appearing first on extremities, with involvement of palms and soles, and then spreading to the face and trunk. The rash was initially maculopapular and erythematous, but it became petechial on extremities. As the fever continued, the patient was admitted to a local hospital for diagnostic evaluation. Hematology profile showed a hemoglobin level of 12 gm/100 ml; hematocrit reading, 37%, and WBC, 5,000/cu mm with 86% neutrophils.

Serology studies requested at the end of the first week for typhoid, brucella, tularemia and rickettsial (Proteus OX-19 only) were negative. Because a chest x-ray reportedly showed infiltrates, the patient was given ampicillin. After ten days, he was still febrile although the rash appeared to be fading. He was then transferred to the University of Missouri Medical Center for further evaluation.

On admission, history revealed (in addition) that four days before the onset of his fever, the patient had removed a tick from his groin when working on a farm in his community.

A physical examination revealed an alert, white boy in no acute distress but appearing weak, with an oral temperature of 101 F, pulse rate 94/min and regular; respiration rate of 14/min; blood pressure, 110/62; and weight, 42.3 Kg. There was a maculopapular rash on the trunk, face and extremities, including the palms and soles, which blanched with pressure except for some petechial areas on the extremities. The conjunctivae and the throat were injected. The chest was clear and there were no heart murmurs. The edge of the liver was tender and palpable 2 cm below the right costal margin. The spleen was not palpable. The patient was complaining of pain at the left elbow. There were no signs of arthritis, and he was able to slowly extend the elbow joint without pain.

Laboratory data studies revealed the following values: hematocrit reading, 34%; hemoglobin level, 9.1 gm/100 ml; WBC, 9000/cu mm; and platelet count, 260,000/cu mm. Prothrombin time and partial thromboplastin time were WNL. The urinalysis also was normal. Serology studies showed an OX-19 titer of only 1:20, but the OX-2 was positive in 1:2560 dilution.

Hospital Course: It was our clinical impression that the patient had RMSF and therapy with tetracycline at 50 mg/Kg/day in four divided oral doses was started before the OX-2 titer was reported. The patient became afebrile on the second day and his general condition slowly improved. The rash continued to fade during his hospital stay. On the fourth day, he was discharged to complete the ten-day course of tetracycline therapy at home. A convalescent stage complement fixation titer drawn by the referring doctor was reported by the State Division of Health in Jefferson City as positive for RMSF at greater than 1:1024 dilution.

DISCUSSION

Clinical Findings

RMSF in man is generally acquired from the bite of an infected tick. The most important vectors in the midwest and Atlantic states are the American dog tick (Dermacentor variabilis) and the wood tick (Dermacentor andersoni) in the Rocky Mountain area.[4] *The two case presentations point out that a common diagnostic pitfall in RMSF is the failure of the physician to inquire about exposure to ticks or tick bites.*

Infections occur most frequently from May to August, corresponding to the high prevalence of ticks at this time of the year.[4] Symptoms can appear from two to 14 days after the tick bite with a shorter incubation period in the more severe cases.[5]

The onset of clinical manifestation is usually abrupt with fever reaching 103 F to 104 F, accompanied by severe frontal headaches and generalized myalgia. A recent report has emphasized the presence of conjunctivitis in this prodromal period.[6] A cutaneous eruption usually appears on the second to fourth day of the illness. The rash is macular, red and flat and appears initially on ankles and wrists, spreading rapidly to involve the entire body, including palms and soles, over the next six to 12 hours. It becomes maculopapular after two to three days. By the fourth day, it is petechial and fails to fade with pressure. *The evolution of the rash in RMSF with its centripetal spread and transition to petechial appearance is the earliest dependable diagnostic sign.* During the eruptive stage, the fever remains high (104 F) with early morning remissions. In untreated cases, the fever may persist for two to three weeks before breaking. Recurrent fever is uncommon except in the presence of secondary pyogenic complications. In mild and moderate cases, the rash will begin to fade during the second week, but in more severe cases, it will be slowly replaced by brownish discolorations which may persist for several weeks during convalescence.

RMSF, like other rickettsiae, is a true infectious vasculitis. There are a variety of findings including the rash indicating vascular involvement of many organs.[7, 8] During the early stages, the patient's pulse is usually accelerated proportionally to the temperature and the blood pressure is well sustained. In severe cases, however, signs of congestive heart failure may be present because of myocardial involvement. In other patients, decreased blood pressure and increased pulse rate are the manifestations of peripheral collapse due to vasculitis, vasodilatation and hypovolemia.

Respiratory symptoms are not uncommon. There is usually a persistent, nonproductive, croupy cough. Localized pneumonitis can occur, whereas pulmonary consolidation is rare and usually indicates a secondary bacterial infection.

Splenomegaly can be found in about 50% of of the cases.[6] A nontender hepatomegaly is usually present, but jaundice as a manifestation of liver dysfunction is rare. The kidneys can be involved in the general vascular process, but renal failure occurs in the severe cases only.

Vasculitis is probably responsible for the periorbital and nonpitting edema which are important diagnostic signs.[8] The vasculitis in severe cases can progress to thrombosis of small blood vessels with resultant gangrene. Mengel[9] was one of the first to call attention to the manifestation of thrombocytopenia in RMSF. Others have since reported cases of RMSF with multiple coagulation defects including thrombocytopenia and hypofibrinogenemia, which we noted in our first case.[10–12]

Evidence of central nervous system (CNS) involvement is common. A recent report emphasizes that the presence of neurologic signs is "ominous" as this is often related to structural damage of the nervous system.[13] The patient can occasionally present with headache, altered sensorium and meningeal signs before the appearance of the rash and cloud the physician's recognition of RMSF. The cerebrospinal fluid frequently shows increased pressure, pleocytosis (usually less than 300 cells/cu mm) and elevated protein. These gradually return to normal as the patient recovers. As a rule, all the neurologic symptoms abate without any residual.

Before the advent of broad spectrum antibiotics, the mortality rate ranged from 13% to 41%, the rate rising with advancing age.[5] Recently, Haynes[6] reported only three deaths (about 4%) in a series of 78 children with RMSF. They succumbed early to the serious complications of RMSF, i.e., vascular collapse, myocarditis and interstitial pneumonitis which were seen frequently before specific antibiotic therapy was known.

Laboratory Diagnosis

There are two commonly employed serologic tests for RMSF. The Weil-Felix test involves agglutination of the patient's serum with strains of Proteus bacilli OX-19, OX-2 and OX-K and may be positive in several of the rickettsial diseases. *In RMSF, there is a great variation in degree and type of responses with the above agglutinations and titers for both OX-19 and OX-2 should be requested.* The typical responses are either a high OX-19 and low OX-2, elevation of both OX-19 and OX-2 or, occasionally, a low OX-19 and a high OX-2.[14] A titer of 1:320 is considered of diagnostic significance. As mentioned in the second case presentation, the local hospital laboratory performed only the OX-19 agglutination which was negative. This, no doubt, was misleading to the referring doctor.

The Weil-Felix agglutinins can appear as early as the fifth day of the illness and are almost always present by the 12th day.[15] They disappear within several months.

The complement fixation test utilizes specific rickettsial antigens and, therefore, is helpful in differentiating the rickettsial diseases. Many hospitals are not equipped to run this test, but acute and convalescent serum specimens can be sent to the State Division of Health in Jefferson City. Complement fixation antibodies usually appear two to three weeks after the onset of RMSF and may persist for years.[15]

Differential Diagnosis

The rash of rubeola, meningococcemia, typhoid fever, ECHO viruses, idiopathic thrombocytopenia purpura, endemic typhus and Henoch-Schönlein purpura can be confused with that of RMSF. The spread of the rash from distal portions of the extremities to the trunk with involvement of the palms and soles virtually rules out the others. With a history of a tick bite in the summer months followed by fever, rash, headache, myalgia, conjunctivitis and periorbital edema, a clinical diagnosis of RMSF can be made and therapy instituted without waiting for the Weil-Felix reaction to turn positive.

Treatment

The broad spectrum antibiotics tetracycline and chloramphenicol are considered equally effective in treatment of this disease. The recommended oral dose is 50 to 100 mg/Kg/day divided into four equal doses and not to exceed a maximum total daily dose of 4 gm in adults. If the intravenous route is used for a severely

(Continued on page 309)

JOHN P. CARMODY, M.D., E. P. SAUER, M.D. *and*
JOHN GLADNEY, M.D., *St. Louis*

Reversible Hearing Loss Due to Ethacrynic Acid in Occult Renal Failure

Case Report

The ototoxic effects of ethacrynic acid have received recent attention in the medical literature.[1-7] Pillay[1] has described three patients in whom the deafness was permanent, and a recent report describes ototoxicity with the combined use of ethacrynic acid and aminoglycoside antibiotics.[3] The purpose of this report is to describe a case in which, in the absence of antibiotics, ethacrynic acid alone was a causative factor and to show the temporal sequence of recovery from the ototoxic effect of this drug. In this patient, poor renal function was suspected only after the development of hearing loss.

Case Report

A 69-year-old Negro woman with known diabetes mellitus was admitted to the hospital because of the sudden onset of bilateral hearing loss which occurred two weeks prior to admission. The patient stated that she had had no hearing problem in her past history. She had experienced slight tinnitus prior to the onset of ENT symptoms, but there was no vertigo, nausea or vomiting. Her drug history revealed that for the previous ten months she had been receiving 250 mg of chlorpropamide (Diabinese) daily for diabetes; reserpine, 0.25 mg qid; and chlorthalidone (Hygroton), 100 mg od for hypertension. She was started on a regimen of ethacrynic acid, 50 mg od two months prior to admission for peripheral edema and she had taken this drug regularly, the total amounting to approximately 3 gm over this period of time.

Otolaryngology evaluation revealed bilateral neurosensory hearing loss (Fig. 1). The patient could hear only if words were shouted loudly into her ear. Laboratory investigations showed a blood urea nitrogen (BUN) value of 80 mg/100 ml and a hematocrit value of 28%. The serum electrolytes were Na-128 mEq/L, K-4.5 mEq/L, Cl-100 mEq/L and CO_2-17 mEq/L. Endogenous creatinine clearance was 26 L/24 hours. Physcial examination was unremarkable except for the hearing deficit. A complete evaluation for the patient's anemia and reduced renal function led to the tentative diagnosis

In this case report, poor renal function in the patient was suspected only after the development of hearing loss. Ethacrynic acid alone is believed to be the causative agent. This case emphasizes the importance of being aware of the toxic effects of this drug and the utilization of serial audiograms to determine if recovery is being made. The authors are from the Departments of Internal Medicine and Otolaryngology, St. Louis University School of Medicine.

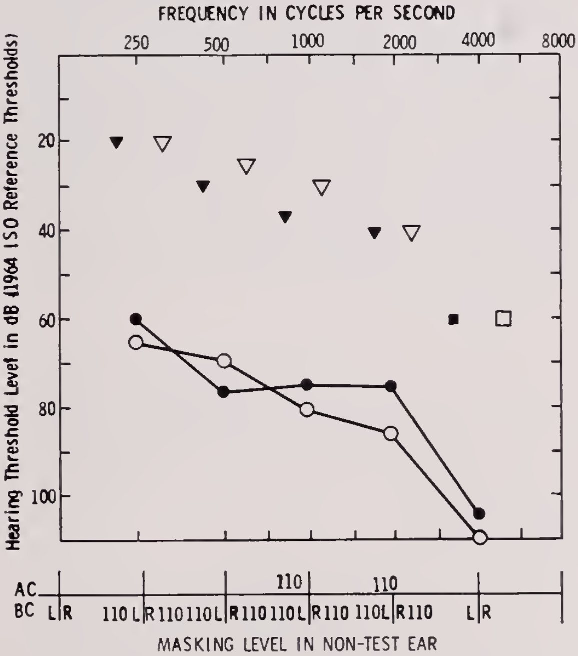

Fig. 1 The patient's audiometric evaluation upon admission to the hospital indicates severe bilaterial hearing impairment.

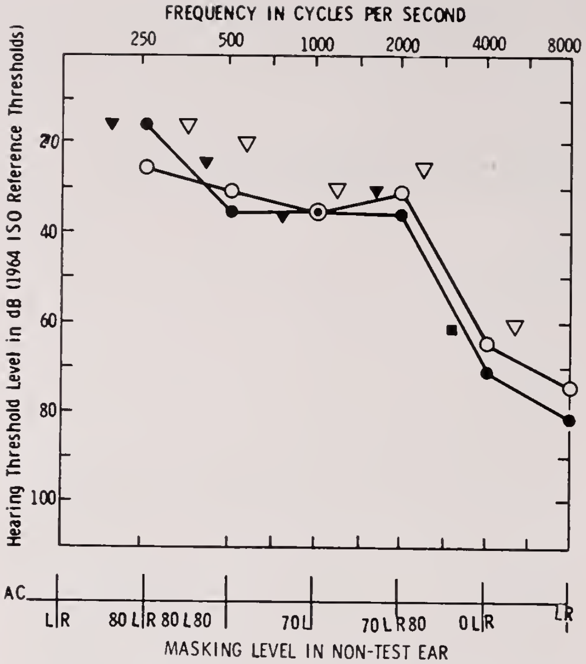

Fig. 2 Audiometric evaluation 15 days after discontinuance of ethacrynic acid therapy. The obvious noticeable improvement in hearing in both ears is seen. Loss in the higher tones appears to be sensorineural bilaterally with excellent discrimination.

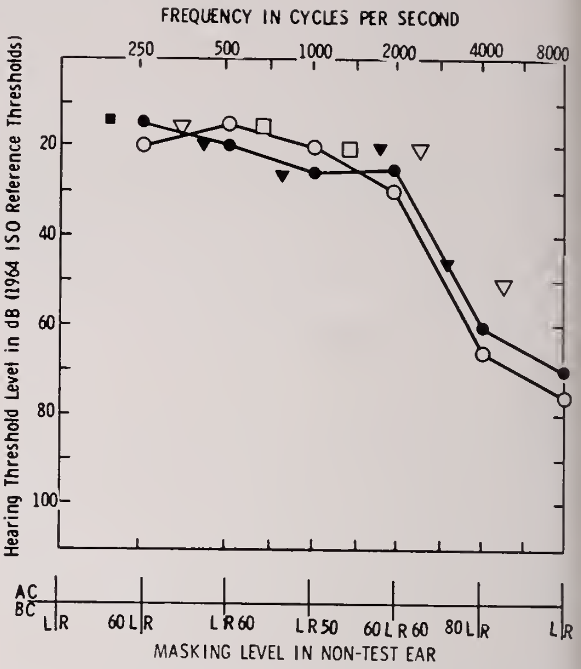

Fig. 3 The patient's evaluation three months later shows marked improvement over the initial evaluation.

of diabetic nephropathy and anemia secondary to renal disease.

Medications were discontinued because of the suspicion that the hearing loss was drug-induced. The patient's hearing improved dramatically within 48 hours (Fig. 2). Audiograms performed at serial intervals confirmed this improvement (Fig. 3). Since this patient, who had been receiving other medications for more than a year without complaining of hearing difficulty, developed a hearing deficit shortly after initiation of ethacrynic acid therapy and since the hearing loss disappeared following discontinuance of the drug, ethacrynic acid alone seems to have been the causative agent.

DISCUSSIONS

The ototoxic effects of this diuretic agent have been attributed to (1) a direct toxic effect on the outer hair cells and alteration of cochlear microphonic potentials,[5] (2) retention of cysteins adducts or other potentially toxic metabolites of the drug in patients with reduced renal function[2] and (3) alteration of the composition of cochlear fluid or supporting cells. In this latter regard, the recent work of Vinnikov and Koichev[8] is pertinent. They found that the localization of sodium in the spiral organ was related to quiet exposure to sound. Different levels of sound exposure led to a sharp increase in the number of sodium-containing granules on the stereocilia membrane of the receptor cells. As a result of their studies, they believed that this increase in the quantity of reaction-products in the cilia of the receptor cells following exposure to sound probably was due to an increase in permability to sodium ions which edema affects.

The drug also has been shown to have effects on the intermediary metabolism of renal tissue.[9] Ethacrynic acid also is known to affect sodium reabsorption in the kidney and this effect has been ascribed to binding of sulfhydryl groups and a oubainlike effect on Na^+-K^- dependent ATPase. This effect has been noted not only in the kidney, but recently it has been reported in the gastrointestinal tract.[10]

Whether or not this may be a generalized action which possibly alters NA^+ migration in the ear is not known. The fact that our patient, who did not receive as much as 3 gm over a two-month period, showed complete reversibility makes awareness of the toxic effects of this drug important and demonstrates the assistance of utilizing serial audiograms to determine whether or not recovery is being made. We, therefore, would concur with Pillay and others who have recommended serial audiograms even in those patients with no known renal disease and, also, that the drug definitely be stopped at the first sign of ototoxicity. Likewise, any patient demonstrating any diminution in hearing while receiving this drug should receive complete renal evaluation, as previously unrecognized impaired function may then become apparent.

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Reprints: John P. Carmody, M.D.
Suite 202
6651 Chippewa
St. Louis, Mo. 63109

Rocky Mountain Spotted Fever

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toxic child, 30 mg to 40 mg/Kg/day of either drug should be administered in three equal doses.[16] Carver[17] suggests that therapy be continued until the patient is afebrile for at least one week to lessen the chance of a relapse.

SUMMARY

Reports of two patients with RMSF, ages 16 months and 13 years, referred to the University of Missouri Medical Center with a diagnosis of fever of unknown origin are presented and salient features of the disease are discussed. To aid the physician in the diagnosis of this potentially fatal infectious disease which is infrequently reported in this state, special emphasis has been placed on inquiring about exposure to ticks, evolution of the rash, multiple system involvement and laboratory tests. Early recognition and initiation of antibiotic therapy is highly essential in minimizing morbidity and mortality.[13]

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Reprints: Leland M. Laycob, M.D.
Development of Pediatrics
University of Missouri
School of Medicine
7th Floor North
Columbia, Mo. 65201

JOSEPH W. MANLEY, M.D. *and*
ROBERT L. NEWMAN, M.D., *Kansas City*

Fetal Monitoring Experiences in a Private Hospital

The traditional method of following the fetal condition during labor has been with auscultation for determining the fetal heart rate and palpation for determining the force and frequency of contractions. However, the inherent vagaries in such a method due to the resultant spot-checking approach has resulted in a number of researchers being concerned with the need for a method of continuous monitoring for labor. Subsequently, a number of persons have suggested the desirability, as well as the advisability, of applying electronic methods to monitoring labor. The most common form available today is continuous measurement of the fetal heart rate, which is shown on a paper tracing, together with a simultaneous reading of the intra-amniotic pressure. Favorable results of such an approach have been reported widely in the literature over the past several years. However, in recent months, one writer has suggested that electronic techniques of monitoring labor are not as practical as previously reported.[1]

Since most of these papers have been from research institutions, we feel experiences with the fetal monitor in a private hospital would be of interest to the private physician. We, therefore, report the results of our first 100 cases of fetal monitoring.

A group of 100 parturients, who were followed through labor with the fetal monitor, includes a wide spectrum of patients with a preponderance of having complications of pregnancy or labor. The authors described these complications and the method of monitoring and summarize the results in tables on the basis of five-minute Apgar scores. Two examples of abnormal tracings are presented. The authors are from the Department of Obstetrics and Gynecology at St. Luke's Hospital. This work was supported by the St. Luke's Hospital Foundation for Medical Education and Research.

The indications of fetal distress as shown by such monitoring have been reported by a number of workers and are well documented.[2-6] Our tracings were interpreted with these findings in mind. Therefore, the discussion of criteria for interpretation of such tracings will be left to more experienced writers.

Material and Methods

One hundred patients monitored during labor were chosen for study. These patients were the first 100 we monitored successfully. Since we use intra-amniotic pressure determinations as well as fetal scalp electrodes, the patients were not connected to the monitor until they had at least a 2 cm-3 cm cervical dilation. In forty-nine of the cases, the patients demonstrated some abnormal condition during their pregnancy or labor. These included breech presentations, induction or stimulation of labor, intrauterine death and cephalo-pelvic disproportion. The period of study covers the calendar year of 1970.

The recorder used is a Corometrics 101 or 102 recorder for fetal heart rate and intra-amniotic pressure. There is a simultaneous oscilloscope tracing of the fetal electrocardiogram. This is used in conjunction with a Corometrics 401 central monitor which has an oscilloscope read-out for the fetal heart rate and intrauterine pressure, corresponding to the paper tracing on the 101/102. This central monitor is located at the nurses' station. Amniotic pressure is recorded by use of a polyethylene tube filled with sterile water and inserted into the amniotic cavity. The other end of the catheter is attached to a Stathan pressure transducer which, in turn, is attached to the recorder. The Hon clip electrode[7] is attached to the fetal scalp. The leads from this are connected to a junction box on the mother's thigh which contains a neutral or ground electrode in contact with the skin. This is attached to the thigh with a Velcro band. A lead connects this to the recorder.

Two approaches are used for attaching the apparatus to the patient. One method is with digital examination. With this method, the catheter is placed between the presenting part and the posterior lip of the cervix. This is done at 2 to 3 cm cervical dilation. It is placed through a plastic catheter guide which is then removed. The electrode is then placed merely by finding the presenting part with digital examination and with the fingers guiding the electrode and applying forcep through the cervix. The alternative method uses the same approach for inserting the intrauterine catheter. However, the electrode is placed under direct visualization using a plastic disposable amnioscope.

As noted above, the resultant permanent records include a fetal heart rate tracing and an intra-amniotic pressure tracing on a paper graph done with a hot needle. These are simultaneously plotted against time. Fetal electrocardiograms may then be recorded with a standard electrocardiogram machine attached to the recorder with appropriate patch cords. These are not done on all patients.

TABLE 1

Condition Demonstrated on Tracing	*No. of Cases*	**Apgar 9-10*	**Apgar 7-8*	**Apgar 5-6*	**Apgar 3-4*
Normal	48	43	3	2	—
Cord compression	23	18	3	2	—
Head compression	15	13	2	—	—
Uteroplacental insufficiency	8	6	—	1	1
Bradycardia	4	4	—	—	—
Acceleration	1	1	—	—	—

* Apgar score at five minutes.

RESULTS

The results of our series are shown in Table 1. It should be noted that we had technical difficulty in only one case resulting in an uninterpretable tracing. This was due to difficulty in attaining proper placement of the intrauterine catheter. The interpretation of the tracings was made on the basis of other persons' research, as previously noted. The first column in the table indicates the various abnormalities found in the tracings. The second column shows the number of cases that were found to demonstrate each of these findings. The remainder of the table is a breakdown of the number of patients in each of these groups on the basis of the five-minute Apgar scores of the infants. The number of patients who demonstrated some degree of abnormality of the fetal heart tracing underwent attempts at correction. These were change of position as well as administration of oxygen by mask.

The distribution of patients showing complications of pregnancy or labor is shown in Table 2. Continuous monitoring was done on complicated patients for the reasons indicated in the left hand column of the table. In the case of the one stillborn infant, the monitor was applied after auscultatory methods, including electronic auscultation, demonstrated no fetal heart tones. This was, in a sense, a diagnostic procedure. This particular labor was then followed with the intra-amniotic pressure device until delivery of the stillborn infant. The two cases with diabetes mellitus were induced at 36 weeks and proceeded without demonstrable abnormality in the tracings. These infants were in good condition at the time of delivery. In the cases

TABLE 2

Conditions Affecting Pregnancy or Labor	*No. of Cases*	**Apgar 9-10*	**Apgar 7-8*	**Apgar 5-6*	**Apgar 3-4*	**Apgar 1-2*	**Apgar 0*
Normal	43	37	3	3	—	—	—
Stimulated	20	17	3	—	—	—	—
Toxemia	13	11	—	1	1	—	—
Induced	13	11	1	1	—	—	—
Cephalopelvic disproportion	3	3	—	—	—	—	—
Diabetes mellitus	2	2	—	—	—	—	—
Twin	2	1	1	—	—	—	—
Breech	2	2	—	—	—	—	—
Scleroderma	1	1	—	—	—	—	—
Intrauterine death	1	—	—	—	—	—	1

* Apgar score at five minutes.

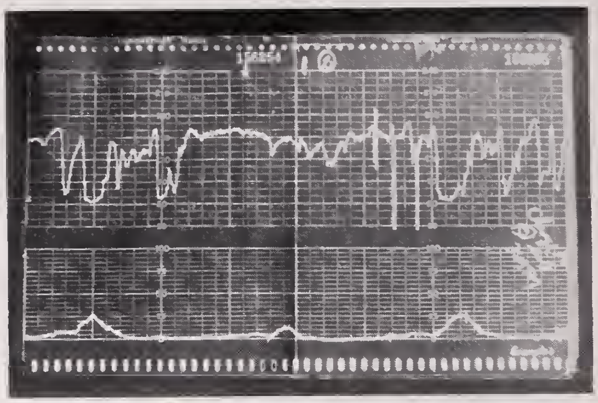

Fig. 1 Portion of tracing showing cord compression.

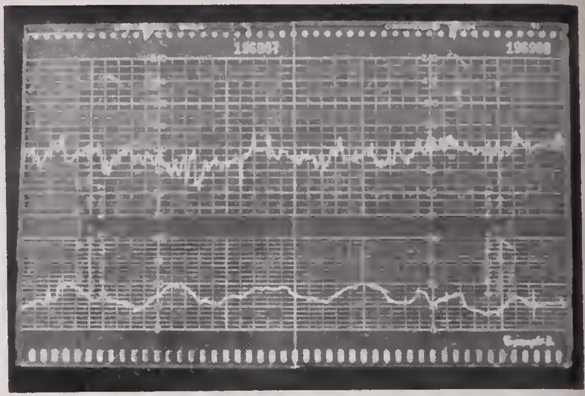

Fig. 2 Portion of tracing showing impaired fetal condition and demonstrating bradycardia.

of the two monitored twin pregnancies, it was the first twin who was monitored with the attachment of the electrode to the presenting part of this twin in each case. In the breech presentations, the electrode was attached to the presenting part. In each of the three cases of possible cephalopelvic disproportion, a trial at labor was attempted. Two of these patients subsequently required delivery by section. The third was delivered vaginally. The most common indication for use of the monitor was the application of oxytoxics for induction or stimulation of labor. In these cases, the monitor resulted in a more thoroughly observed labor.

In this series, a total of four cesarean sections were performed. Two of these were performed for cephalopelvic disproportion. The remaining two were performed because the monitor tracing demonstrated some abnormality. In one of these cases, that abnormality was the one described for cord compression. The changes were quite severe (Fig. 1). The other case, showing impaired fetal condition, demonstrated bradycardia (Fig. 2). It should be noted that each of these infants had a five-minute Apgar score of ten.

It is somewhat alarming to us that the infants showing low Apgar scores were not all predicted to have such ratings on the basis of their fetal heart tracings prior to delivery. One can see from the tables that these infants demonstrated intermediate Apgar scores.

Patient acceptance of the technique of applying the monitor was good. All patients were monitored with thorough explanation and discussion of the reason for use of the monitor. Such preparation helped the patients adjust to the procedure. The patients who did complain of the greatest discomfort were those in which monitoring was started at a later point than 2-3 cm cervical dilation. It was with these patients that the greatest difficulty in placement of the intrauterine catheter was encountered. No women in this series noted an increase in discomfort with labor following the placement of the sensing apparatus.

Discussion

In this series of patients, 99% of the patients were monitored with relative ease. There was one failure of application of the sensing units. The technique was well accepted by the patients and has been accepted by the practicing physicians at this hospital. Most physicians prefer to reserve the use of the monitor for those patients with some abnormality which might affect the outcome of their labor.

Following the application of the monitor to the patient, it was found that labor could be monitored until the time of delivery, regardless of the length of labor. In some cases, this was a very short time, less than an hour. In others, this covered a time span of several hours, which occasionally necessitated refilling the recorder with tracing paper.

In this series of 100 patients, there was one fetal death. This particular patient, as noted previously, actually died prior to the application of the monitor and was not monitored at the time of death. This compares with an overall perinatal mortality rate at this hospital of 1.8% for the year 1969 for infants weighing 500 gm or more. The section rate in this series of patients is 4%. This compares with an overall section rate at this hospital of 2.1%. However, this series is biased with complicated cases which makes interpretation difficult. Eighty-five percent of the infants delivered in this series demonstrated a five-minute Apgar score of nine or

(Continued on page 316)

RUSSELL E. FELKER, WILLIAM C. CRITCHLOW, M.D.,
JEAN-R. DUPONT, M.D. *and* ROBERT C. AHLVIN, M.D., *Sikeston*

Pheochromocytoma: Current Management in a Community Hospital

Case Reports

Pheochromocytoma has been recognized as a distinct entity for almost 100 years,[1] yet it is rarely diagnosed.[2] Only one in ten physicians is likely to make that diagnosis during his lifetime.[3]

The association of the tumor with clinical entities in addition to hypertension, such as medullary thyroid cancer, Von Recklinghausen's disease and Von Hippel-Lindau's disease, has been recognized recently as has the familial incidence of the tumor.[4] The diagnosis and management of the patient with this tumor has been improved due to increased understanding of the various manifestations the tumor may produce in the host.[5]

Patients with this tumor can now be effectively diagnosed and treated in the community hospital.

Case Report

The patient was a 28-year-old black woman who came to the emergency room of the Missouri Delta Community Hospital complaining of severe headache for one week. She had had severe headaches for the past six years and she had noted that they were associated with sweating and a sensation of extreme heat. She had been seen in the emergency room on previous occasions, and was noted to have severe hypertension each time.

On this occasion, her blood pressure was 220/140 mm Hg. The pulse rate was 160 beats per minute, regular and she was afebrile. She was somewhat drowsy and had slurred speech. There was blurring of the optic disks. Her heart was normal except for the tachycardia. Some observers felt a small mass deep in the right flank. Laboratory studies including hemoglobin level, hematocrit reading, urinalysis, blood urea nitrogen (BUN), serum phosphorus concentration, calcium, cholesterol and blood glucose were all normal. The protein-bound iodine (PBI) was 7.5, and T-3 by column was 3.1. A spinal tap was normal. Urinary catecholamines were elevated as was the vanilmandelic acid (VMA). Chest and skull x-rays were normal. An intravenous pyelogram also was normal.

As the patient had been taking thiazide and methyldopa (Aldoril), the urinary catecholamine and VMA determinations were repeated after several days and were still elevated although less so than previously. A translumbar aortogram was performed and a large vascular tumor was demonstrated above the right kidney (Fig. 1). The patient received phenoxybenzamine hydrochloride (Dibenzyline) four days prior to surgery and was given daily transfusions of blood and Ringer's Lactate in an effort to expand her plasma volume. Through a vertical midline incision at operation, satisfactory exposure of a large right suprarenal tumor was obtained. The tumor was not manipulated until after the adrenal veins were identified and ligated. During the abdominal operation, there were two short episodes of hypertension, which were easily controlled with 2.5 mg of phentolamine (Regitine) intravenously.

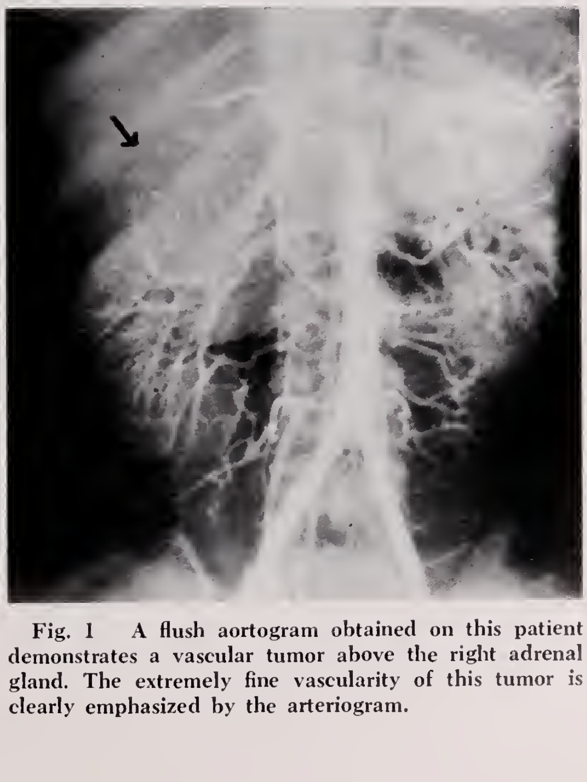

Fig. 1 A flush aortogram obtained on this patient demonstrates a vascular tumor above the right adrenal gland. The extremely fine vascularity of this tumor is clearly emphasized by the arteriogram.

Pheochromocytoma has been recognized as a distinct but rare entity. This is a report of the successful diagnosis and management of a patient with a pheochromocytoma in a community hospital. The authors discuss principals of current surgical and pre-and post-operative preparation and point out features in management and diagnosis which may be helpful to the physician away from the medical center. Mr. Felker is a fourth-year student at the University of Missouri School of Medicine who has served as an extern at the Missouri Delta Community Hospital. Dr. Critchlow is in the private practice of family medicine. Dr. Dupont is in the private practice of surgery. Dr. Ahlvin is from the Department of Pathology, Missouri Delta Community Hospital.

The specimen was an adrenal gland that weighed 65 gm (Fig. 2). It was grossly distorted due to the presence of a soft grey tumor approximately 3 cm in greatest dimension and located in the medullary portion of the gland. A thin rim of bright yellow adrenal cortical tissue was identifiable over the external surface of the tumor, and there were irregular areas of interstitial hemorrhage within the tumor. No gross necrosis was identified.

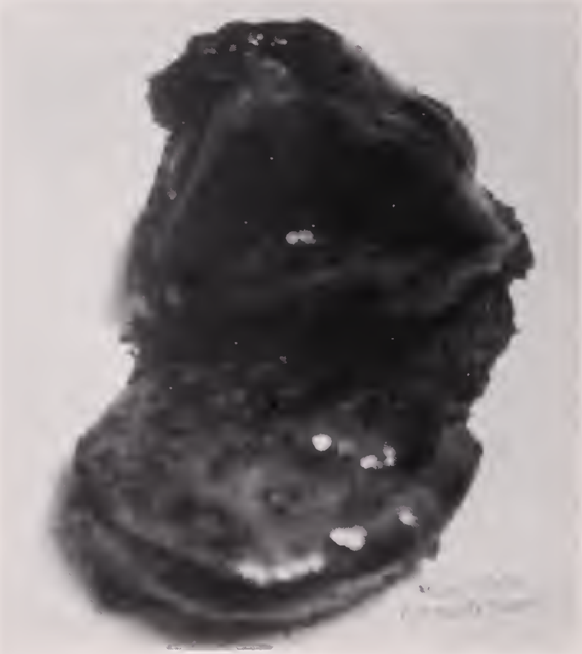

Fig. 2 The tumor itself with cut surfaces showing. The specimen weighed 65 gm and measured approximately 3 cm in greatest diameter.

Microscopically, the tumor was composed of rather large cells with abundant cytoplasm arranged in small nests separated by a delicate fibrovascular stroma. There was considerable variation in the size and shape of tumor nuclei, and there were conspicuous nucleoli. A golden brown cytoplasmic pigment was present and was best seen in portions of the tumor fixed in Zenker's fixative. A small organizing thrombus was seen in a vein within the tumor. No vascular invasion by tumor was encountered and the tumor was confined to the adrenal gland. The sections confirmed the presence of adrenal cortical tissue about the periphery of the tumor. Mitotic figures were not seen within the tumor. These gross and microscopic features were typical of a pheochromocytoma.

The patient's postoperative course was benign, and she was discharged on the eighth postoperative day and was asymptomatic and normotensive. She has remained well for the past 18 months since the operation.

Discussion

The clinical picture of hypertension, episodic flushing, diaphoresis and headache as seen in our patient should lead one to suspect a pheochromocytoma. However, the clinical manifestations are quite variable and may range from mild hypertension to hypertensive crisis.[6] The signs and symptoms are caused by the physiologically active substances, usually norepinephrines and epinephrines, produced by the tumor and released from it. The diagnosis of pheochromocytoma can be established by the identification of increased urinary catecholamines (epinephrine and norepinephrine) and their primary catabolites, VMA and metanephrines, or all of these.

Total catecholamines are measured fluorometrically in the urine and spurious elevations may be caused by medications, including adrenalin or adrenalin-like drugs; antibiotics, such as tetracyclines and quinidine; and some antihypertensive agents, particularly methyldopate hydrochloride (Aldomet). From the standpoint of laboratory methodology, VMA is preferable to the total catecholamine estimation, however, false elevations again occur with medications and foods which give rise to phenoxy acids in the urine. Coffee, fruits (especially bananas) and many drugs (including aspirin) may produce false elevations of urinary VMA. Recently, a VMA test strip has been introduced as a screening procedure.[7] The strip detects abnormal levels of VMA in urine and is extremely simple to use and very inexpensive. The experience of using the test strip as a routine screening procedure in children to detect neuroblastoma (a tumor that also may produce elevated urinary VMA) has been published and appears very gratifying.[7] The usefulness of the strip for screening hypertensive adult patients for the presence of pheochromocytoma is being evaluated at this time. Metanephrines are technically somewhat more difficult but can be measured using the method of Pisano.[8] The principal metabolic pathways of epinephrine and norepinephrine are outlined in Table 1.

The histamine test[9] and, later, the Regitine test[10] were widely used in the past. However, they both have side effects which may be severe and even life-threatening. They should be abandoned in favor of the more accurate chemical tests which carry no risk to the patient.[2, 3]

Simple x-rays are of little value in the diagnosis of abdominal pheochromocytoma.[11] Arteriography, however, is a useful tool to localize the tumor.[12] Furthermore, aortography may be of value in the differential diagnosis of hypertension when two or several causes coexist.[13] As these tumors occur in any location where chromaffin tissue is found, they may occur (and approximately 10% of them do) outside of the adrenal gland. They have been reported occurring in the neck, mediastinum, retroperitoneum and in the wall of the urinary bladder.[14] Severe hypertension may follow the injection of the contrast material; thus, the patient should be monitored carefully during the procedure and Regitine should be available in the event a hypertensive crisis occurs.

The surgical management of patients with pheochromocytoma was notoriously difficult. Marked hypertension during the surgical removal of the tumor, followed by profound shock and hypotension postoperatively, were the principal manifestations of the problems which confronted the surgeon of yesteryear. It is now felt that preoperatively, there is generalized vasoconstriction caused by the active products of the tumor, and following removal of the tumor, a profound relative hypovolemia occurs because of the absence of the previously present vasoconstriction. Current management[5, 15] calls for a gradual expansion of the blood volume over several days in the preoperative period with vasodilatation using alpha blockers, such as phenoxybenzamine hydrochloride (Dibenzyline), until a few hours before surgery. At surgery, care should be taken not to manipulate the tumor until the adrenal veins are ligated. Paroxysms of hypertension during surgery are managed with small doses of Regitine. Because of the excellent exposure, the transabdominal approach is preferred.[16] With proper preoperative preparation and careful attention to surgical technique, the postoperative period is benign and the profound hypotension, which was frequently observed following removal of a pheochromocytoma, is now rarely encountered.

TABLE 1

Norepinephrine	→	Normetanephrine	→	Excreted and/or conjugated
		↓		
		3-methoxy-4-hydroxy mandelic aldehyde	→	V M A (Vanillyl mandelic acid)
		↑		
Epinephrine	→	Metanephrine	→	Excreted and/or conjugated May be assayed in the clinical laboratory

Table 1 represents the metabolic pathways of norepinephrine and epinephrine. Both conjugated and excreted normetanephrines and metanephrines may be assayed in the clinical laboratory as may be VMA at the present time. However, the VMA is the only useful test for the smaller laboratory.

Anesthetic agents which are associated with cardiac arrhythmias should be avoided. The agents of choice may be a combination of pentothal, nitrous oxide, meperidine hydrochloride and succinylcholine.

Malignant variants of pheochromocytoma occur but are infrequent. Much more common is the presence of more than one benign pheochromocytoma in the patient. Because of the marked pheomorphism of the benign tumor, the recognition of malignancy is difficult and cannot always be done on a cytologic basis.

Summary

This is a report of the successful diagnosis and management of a patient with a pheochromocytoma in a community hospital. Principals of current surgical pre- and postoperative preparation are discussed.

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Reprints: Jean-R. Dupont, M.D.
Ferguson Medical Group
1012 N. Main
Sikeston, Mo. 63801

Fetal Monitoring Experiences

(Continued from page 312)

better, whereas only seven demonstrated a score of five or less.

In applying the instrumentation to the infant, we questioned the effects on the infant. The electrode was of the clip type and was applied to the presenting part. The possibility of lacerations of the presenting part was a concern. However, on examination at the time of delivery, only two small puncture wounds were noted on the presenting part. At the time of the infant's discharge, usually three to four days, the puncture wounds were barely evident. This was true in all cases. There has been no morbidity associated with the application of the electrodes. In terms of the effect on the mother, two instruments were applied—the electrode as well as the intra-amniotic catheter. We found no morbidity associated with the application of either instrument. It should be noted that in one case, which is not included in the series, prolapse of the cord occurred.

SUMMARY

The findings demonstrate that the use of the monitor is practical and easily interpreted. However, one limitation is that it can be applied only with a dilated cervix. With further refinement of the techniques, we should someday be able to monitor the early phases of labor which the present method does not allow. Such devices are available, but they are subject to some artifactual problems at this time. The second limitation is that physicians are hesitant to apply the sensing units to the patients, either because they are not acquainted with the techniques involved or because they fear for discomfort to the patient. It is felt that these concerns are poorly founded in view of the possible benefits.

Due to the heavy bias of our patient group with complicated cases, it is felt at this time that the comparison of statistics with and without monitor usage are not valid. Therefore, it is not possible to offer definite conclusions as to the effect of this technique on perinatal morbidity and mortality. It is our opinion that fetal monitoring equipment is helpful and worthwhile, especially in complicated cases.

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Reprints: Robert L. Newman, M.D.
St. Luke's Hospital
44th & Wornall Rd.
Kansas City, Mo. 64111

Special X-ray Exhibit

SIDNEY RUBIN, M.D., RODGER LAMBIE, M.D.,
EDWIN HERMAN, M.D. *and* **NANCY WALDMAN, M.D.,** ***Kansas City***

Radiologic Problem Case

A 79-YEAR-OLD WHITE MAN was admitted to the hospital for evaluation of weight loss. The patient was aware of excessive wasting which appeared to start insidiously in the past year and became most profound in the past two months. Associated with this loss of weight was difficulty in swallowing and frequent, annoying regurgitation.

Past History: There was no history that was considered contributory to the present complaint. The patient neither drank excessively nor smoked. The only previous surgical procedure was an appendectomy performed ten years prior to admission.

Physical Examination: The patient was an emaciated white man who appeared chronically ill. He was in no acute distress. His blood pressure was 108/80; respiration rate was 18 and regular. His temperature was 98 F. There was no evidence of jaundice or lymphadenopathy and there were no palpable masses noted within the abdomen. There was no tenderness noted. Except for a soft, slightly enlarged prostate, the remainder of the examination was within normal limits.

Laboratory Data: Hemoglobin level was 15 gm/100 ml; white blood cell count was 13,000 with a slight shift to the left. The SMA 12 and urinalysis were within normal limits. The EKG was normal and the VDRL was nonreactive.

Radiological Findings: An upper gastrointestinal (Figs. 1 & 2) study revealed a markedly dilated esophagus containing fluid and undigested debris. The peristaltic activity was modified and appeared ineffectual so that only a small amount of barium was propelled downward into the stomach through a narrowed lower esophageal segment. The distal end of the esophagus tapered conically with smooth and symmetrical

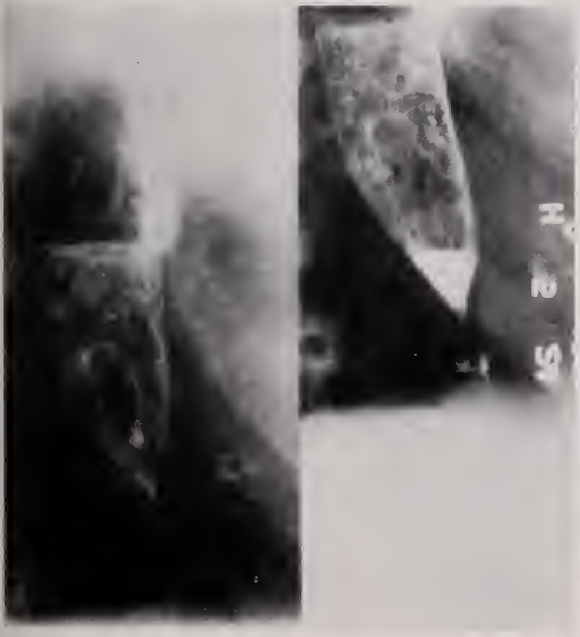

Fig. 1 Esophagus is dilated and contains fluid and ingested material.

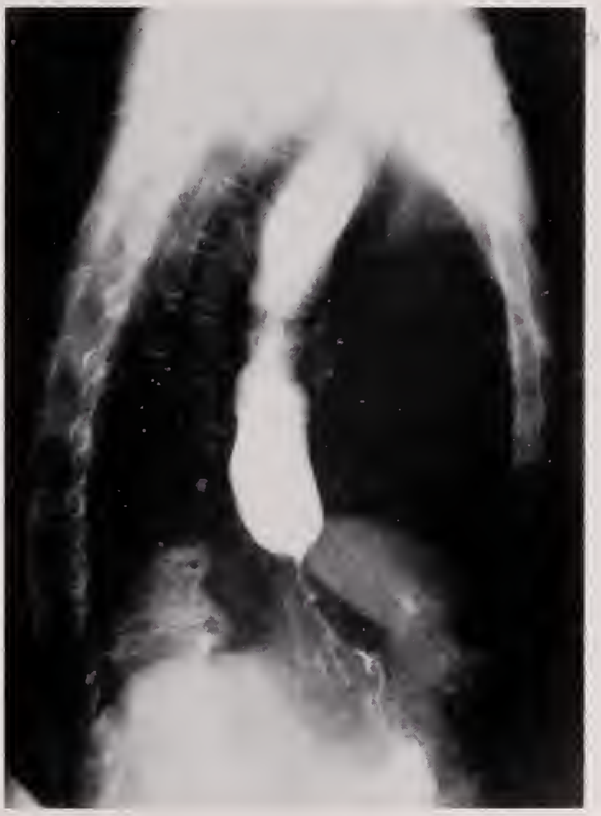

Fig. 2 Esophagus distended with barium revealing conical lower end of esophagus and cardia. There is lack of peristaltic activity exemplified in the tubular appearance of esophagus.

The authors of this series of articles presenting unusual radiologic problem cases are from the Department of Radiology, Menorah Medical Center, where Doctor Rubin is Chairman. They were assisted in this case by Hal Marshall, M.D., Pathologist, and W. H. Jacob, M.D., Radiologist.

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sides. The marked degree of dilation and smooth, narrowed lumen suggested an achalasia. A liver scan was done and appeared normal.

Discussion

Achalasia is characterized by the absence of effective peristalsis in the body of the esophagus, failure of the gastroesophageal sphincter to relax and a characteristic hypersensitivity to cholinergic drugs. Clinically, the patient complained of a combination of symptoms such as dysphagia, regurgitation, retrosternal pain and weight loss.

The Mecholyl test has been considered a very useful aid in differentiating carcinoma from achalasia. However, this has been known to lack specificity and, thus, to fail in establishing an unequivocal diagnosis.

Cine radiographic studies and fluroscopy have been well defined in the classical pictures of achalasia and, routinely, the roentgen picture offers very little or no difficulty in establishing the diagnosis. Occasionally, however, a smooth tapered distal esophagus will be observed with symmetry of the esophageal-cardia junction that defies a correct diagnosis. Even the clinical history will not differentiate between achalasia or carcinoma since both conditions can develop rapidly. In a series of 100 cases described by Lawrence and Shoesmith,[1] 16 patients had symptoms of less than 12-months duration. The onset of the achalasia occurred preponderantly in the fourth to sixth decades of life.

Since ineffective, uncoordinated peristaltic waves have been described in achalasia, the Mecholyl test[2] had been relied upon for aiding in the differential. The intramuscular injection of this cholinergic drug, in the classical achalasia, produces a considerable increase in peristaltic activity. The barium is seen to move retrogressively toward the oral cavity, while some passes through the lower esophagus. In the main, carcinoma does not respond in a like manner to this stimulus. Recent articles have shown the limitation of this technique in making a diagnosis.[3] Manometric determinations may be an aid.[4] but in the final analysis, direct viewing of the area and a histological evaluation of the narrowed segment is essential in securing a correct diagnosis.

One should be highly suspicious of a lesion of the esophagus in the older age group, even when the appearance is characteristic of achalasia. While manometrics, the Mecholyl test and cytology offer some help to the clinician, the only pathognomonic observation is a histological study obtained by esophagoscopy and biopsy.

Endoscopic Report: Endoscopy revealed the esophagus to be filled with debris. The distal end was concentrically narrowed, inflamed, friable and resistent to distention. Biopsy was taken from the proximal end of the narrowed area (W. H. Jacobs, M.D.).

Gastroenterologist Diagnosis: Carcinoma of distal end of esophagus.

Roentgen Diagnosis: Achalasia.

Pathological Findings: Pathological examination demonstrated atypically of the epithelial cells with extreme variation and hyperchromicity consistent with a diagnosis of infiltrating, poorly-differentiated squamous cell carcinoma with extention into the underlying connective tissue (Hal Marshall, M.D.).

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At the January, 1973 meeting of the American Society for Surgery of the Hand in Las Vegas, Nev., the following officers were elected: president: Martin Entin; president-elect: Lee Milford; vice-president: Adrian Flatt; secretary: John Boswick; and historian: Ralph McFarlanee.

Continuing Education Coming Events

May 10-11	**Symposium: Inhalation Therapy** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan.
May 10-12	**Postgraduate Seminar—The High Risk Patient in Obstetrics and Gynecology** Department of Obstetrics and Gynecology, Kansas City General Hospital and Medical Center; Kansas City Gynecological Society Crown Center Hotel, Kansas City
May 14-15	**Symposium: New Advances in Electrocardiography** Postgraduate Medical Study K.U. School of Medicine, Kansas City, Kan.
June 1	**11th Annual Pediatric Seminar—Pediatric Ophthalmology** Baptist Memorial Hospital, Kansas City
June 1-2	**Annual Professional Meeting** Missouri Chapter of the American College of Surgeons Crown Center Hotel, Kansas City

New Concept in Continuing Medical Education at MU-KC

The first Long Weekend, a new concept in continuing medical education, with programs designed for both the physician and his wife, will be presented on May 18-19 at the new Crown Center Hotel in Kansas City. The event is sponsored by the University of Missouri-Kansas City School of Medicine and the Division for Continuing Education, Missouri Regional Medical Program, Kansas City Southwest Clinical Society and the Academy of Health Professions.

The medical program will provide the practitioner with solid clinical knowledge useful in the practice of medicine. The format will stress involvement and participation with an emphasis on case presentations and workshops as well as indepth discussions and practical demonstrations. The sessions will cover the subjects of diabetes mellitus and thyroid disease.

The wife's program will provide opportunities for small group discussions with University faculty on the subjects of The Contemporary Woman, Poetry and Painting and the new University of Missouri-Kansas City Medical School.

Registration will be limited. For the program and registration information, contact The Long Weekend, University of Missouri-Kansas City School of Medicine, 2220 Holmes St., Kansas City, Mo. 64108 or phone 816-471-3876.

Missouri Ophthalmological Society to Meet in October

Felix N. Sabates, M.D., Kansas City, was elected president of the Missouri Ophthalmological Society at the spring meeting on March 31 at the Chase Park-Plaza Hotel in St. Louis.

The fall meeting of the Society will be held on October 19-21 at the Lodge of the Four Seasons, Lake of the Ozarks. Guest speakers will be Drs. Marshall Parks, Ephraim Friedman, Mansour Armaly and E. Grey Dimond.

For further information concerning the meeting, members are invited to contact Carl H. Ide, M.D., Secretary-Treasurer, N309 University Medical Center, Columbia 65201.

"Without your help

. . . I simply would not have made it through medical school!"

(The following letter was received on Oct. 1, 1971 from a physician who, as a student, received financial assistance from the Missouri State Medical Association members who have contributed to the Missouri State Medical Foundation. It is printed with his permission.)

Dear Doctor:

"Thank you very much for your thoughtful letter concerning receipt of my final payment on my medical student loan.

"I can well remember the feeling of destitution associated with being a reasonably good student but lacking funds with which to enroll for the next semester in medical school. Having always been, perhaps, more than adequately endowed with pride, it was a lesson in discipline and humility to go seeking financial assistance. However, the effort brought me in contact with some very nice people who really do a lot to keep one's faith in human nature alive.

"I sincerely appreciate the efforts which you and others put into the Missouri State Medical Foundation and all other student loan funds. You should feel a quiet heroism for the assistance you lend to needy students . . . without your help, I simply would not have made it through medical school."

The Missouri State Medical Foundation—MSMF—was created by the Missouri State Medical Association for the express purpose of giving financial assistance to deserving young Missourians who will be tomorrow's doctors.

Send a Check Today to MSMF!

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The Missouri State Medical Foundation is classified by the Internal Revenue Service under Section 509(a)(3). Individuals may deduct up to 50% of their adjusted gross income for contributions made to the MSMF.

President's Message

Now that the 115th Annual Session of the MSMA is over, we can start "counting our blessings" as we get back to our daily routine of caring for the sick.

For the first time in the history of the Missouri State Medical Association, medical students were given the opportunity to participate. Eight delegates, two from each of the four medical schools in Missouri, are now eligible to vote at the state meetings. The students seemed to be very interested in the various resolutions. There was considerable diversity in their opinions, and they did not vote "en bloc." We were glad to have their participation.

E. A. Stricker, M.D.

Another unusual aspect of the program was the opening of the General Session with talks by two prominent members of Congress. Our Missouri Congressman, James W. Symington, talked about "Health as the Federal Legislative Challenge" and Dr. Tim Lee Carter, Congressman from Kentucky, spoke on "The Federal Role in Medicine." Since medical legislation seems to be the "name of the game," this session was well attended. Both speakers intimated that some form of national health insurance is in the making and probably will be passed within a year or two. The most popular version is the AMA Medicredit Bill, which has 160 sponsors. This shows that the AMA and AMPAC have been doing their homework. It behooves us to support these groups more than ever.

A relatively new AMA policy is for one member of its Board of Directors to attend each state medical convention. We had the honor of having Dr. James H. Sammons of Baytown, Tex., who is Vice-Chairman of the AMA Board of Trustees. Dr. Sammons, a graduate of St. Louis University School of Medicine, discussed the role of the AMA in medical legislation and answered questions pertaining to AMA policies. His presence at the meeting in St. Louis shows the interest of our AMA Board in trying to communicate with the "grass roots" members in order that the organization may better serve us all.

Our guest speaker at the banquet was The Honorable William C. Phelps, Lieutenant-Governor of Missouri. The present administration is interested in the development and coordination of emergency health care facilities all over the state and their accessibility to everyone. Lieutenant-Governor Phelps invited suggestions from all interested physicians.

All in all, the Annual Session was highly successful in terms of physician attendance; of varied programs offered concurrently by the specialty groups; in terms of entertainment planned by our hosts, the St. Louis and St. Louis County medical societies and their auxiliaries; and of the efficient coordinating efforts of our staff in Jefferson City.

Woman's Auxiliary

'50 JOYOUS YEARS OF SERVICE'

Fifty years of dedicated service means never having to say that you haven't devoted countless hours of thought and effort to the well-being of your fellow citizens.

Every active member of the Woman's Auxiliary to the MSMA can make that statement with pride, because the Auxiliary will celebrate its Golden Anniversary one year from now at the state convention in Kansas City. This should be an exceptionally interesting and inspiring year for each of our members.

Mrs. Charles R. Willman
President

During the past 50 years, our members have given many hours in volunteer work for the good of our communities throughout the state and should be proud of each year's accomplishments.

This Auxiliary year started with our annual Legislative Day in Jefferson City on April 11. We thank the MSMA staff for their help in making it such a memorable day. It was good to see so many of our friends interested in state government and in meeting their legislators. This is a *must*, if we are to be effective in helping our husbands.

My theme for the year, "50 Years of Joyous Service," expresses our thankfulness for all the blessings bestowed upon us. Also, "Building the Future on the Heritage of the Past" will be our main premise for encouraging continued progress and support in all areas from Health Education to Legislation, Public Affairs, MMPAC, Health Manpower, AMA-ERF and the Missouri State Medical Foundation (student loan fund).

We will continue to stress the importance of membership this year and look forward to adding many new members. I look forward to working with Mrs. George J. Lytton, President-Elect of our Auxiliary, and the MSMA Council in pursuit of our common goals, knowing that each of us can help the other.

We are all grateful to Mrs. Keith D. Jones (Ruthanne), our Immediate Past-President, for her untiring efforts on behalf of the Auxiliary. The state convention in St. Louis was outstanding from the Auxiliary's first Public Affairs Breakfast to the delightful luncheon style show in which our members modeled the fashions they had made. I, personally, am appreciative of Ruthanne's continuing interest and help in planning the coming year.

I am confident that our members will help to make ours an even better Missouri Auxiliary by supporting it through membership and by continuing to give of themselves as they have in the past.

EDITORIAL

"MR. CHAIRMAN, MEMBERS OF THE SUBCOMMITTEE, I AM DR. RUSSELL B. ROTH . . ."

Among 26,000 bills introduced into Congress in the past two years, more than 2,400 were of some medical significance. It is no small task to keep abreast of them. Certainly, no individual physician and, for that matter, no individual legislator, can hope to know much about any of them. For the legislators, it is a matter of good staff work and political trade-offs for support. For physicians, it has to be good staff work in our Washington Office, careful analysis by our Council on Legislation and spokesmanship plus politics at the decision-making level.

Obviously, the outstanding medical issue of the past two Congresses has been the subject of national health insurance. Four years ago when there was great fanfare as the Committee of 100 for National Health Insurance unveiled its masterplan for the construction of a huge medical bureaucracy and as Senator Kennedy and Congresswoman Griffiths introduced the Health Security Act, it was adopted by organized labor as its number one priority for passage. It was touted as the idea whose time had come. The question was not whether it would be enacted, but when.

But now, four years later, the Kennedy bill, and the threat it represented, is slowly dissipating. It seems worthwhile asking "why?" The bulk of practicing physicians are obviously happy that the Kennedy bill is nearly defunct, but I am not sure many of them know why. It just didn't take sick and die. It took an immense amount of concentrated effort to establish in Congress and in the country at large that the Kennedy bill was a massive mistake.

The Administration was against it, as was the private health insurance industry and the AMA. It required substantial cooperation with many meetings, hours of Congressional testimony, thousands of speeches and volumes of the written word to carry the message. It was accomplished. It cost AMA dues money to do it. It took many, many man-hours of a superb Washington staff and speeches and testimonies of a wide variety of AMA officers and spokesmen.

It was my personal opportunity—or obligation—to make dozens of speeches across the country, write over a dozen articles for publication, hold innumerable press, radio and television interviews on the subject and appear in the Senate before the Finance Committee and its separate Subcommittee on Health chaired by Senator Kennedy and in the House before the Ways and Means Committee and Representative Paul Rogers' Subcommittee on Health. Virtually every other officer of the AMA and member of the Board of Trustees, as well as a large number of Council and Committee members, were doing likewise. It is nice to feel that we have helped and that our efforts on behalf of the profession as well as the public have been successful.

As individuals, it would seem a hopeless task. But collectively and cooperatively, we can be—as we have been—a positive force in shaping the health care delivery system in this country.

In the final analysis, the AMA's voice can only be as strong as all of us, members of the profession, choose to make it. If we are to increase the AMA's effectiveness, if we are to increase its influence, we need the support of every physician.

RUSSELL B. ROTH, M.D.
President-Elect
American Medical Association

IMPROVED ACCIDENT & HEALTH PROGRAMS

The Disability Income Policy sponsored by the Missouri State Medical Association since 1943 has now been made GUARANTEED RENEWABLE and income benefits are available up to $300.00 weekly to members under age 56 subject to acceptance by the Company.

Also, the Major Hospital and Nurse Expense Program offers higher limits with increased Room & Board Benefits.

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(Western Missouri Administrators)

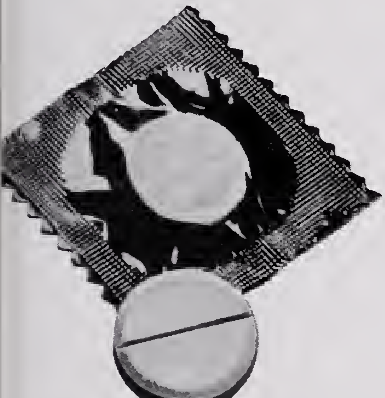
Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole. **Warnings:** If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established. **Precautions:** Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored. **Adverse Reactions:** Most frequently encountered are anorexi nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddines and headache have occurred. Rarely, tinnitus, hyperirritabilit numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis an parenchymal liver damage; hyperglycemia; transient leukope malodor of the urine, crystalluria, hematuria; appearance of Ascaris in the mouth and nose. Hypersensitivity reactions

Chewable Tablets 500 mg

Mintezol®

(THIABENDAZOLE | MSD)



so easy to take everyone in the family can keep to the regimen you prescribe

include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy.
Supplied: Chewable tablets, containing 500 mg thiabendazole, in boxes of 36, strip packaged, individually foil wrapped; Suspension, containing 500 mg thiabendazole per 5 ml, in bottles of 120 ml.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., INC., West Point, Pa. 19486

MSD
MERCK
SHARP &
DOHME

addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

POWELL & HYDE Sts.
513
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SAN FRANCISCO MUNICIPAL RAILWAY

If he's making the rounds of San Francisco...

Antivert®
(meclizine HCl)
for vertigo*

:ivert® (meclizine HCl) has been found
'ul in the management of vertigo associ-
l with diseases affecting the vestibular sys-
. It is available as Antivert (12.5 mg.
:lizine HCl) and Antivert/25 (25 mg.
:lizine HCl) scored tablets for conven-
:e and flexibility of dosage. Antivert/25
mg. meclizine HCl) Chewable Tablets
available for the management of nausea,
niting, and dizziness associated with mo-
ı sickness.

NDICATIONS. Based on a review of this drug by
ıe National Academy of Sciences-National Research
Council and/or other information, FDA has classified
ıe indications as follows:

Effective: Management of nausea and vomiting and
izziness associated with motion sickness.

Possibly Effective: Management of vertigo asso-
iated with diseases affecting the vestibular system.

Final classification of the less than effective indica-
ions requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12th-15th day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG *Pfizer*
A division of Pfizer Pharmaceuticals
New York, New York 10017

LETTERS to the Editor

Dr. Joseph V. Finnegan, M.D., Editor
Missouri Medicine
515 East High St.
Jefferson City, Mo. 65101

Dear Dr. Finnegan:

I wish to comment on the editorial of Dr. Donald E. Kuenzi [Feb. 1973, Vol. 70, pg. 111]. Times are changing, but I believe most physicians remain interested in creating conditions of practice which allows them an individual relationship with their patients and a reasonable degree of personal freedom. I do not believe that most young men enter the medical profession solely for financial rewards, or even for intellectual stimulation, but that many appreciate and seek a degree of freedom and responsibility inherent with a practice. Certainly, it is these responsible, bright people that we wish to encourage to continue entering the medical profession.

I would agree with Dr. Kuenzi that working in the highly regulated situation that he describes would be an anathema to most physicians in practice today. In an economy which is otherwise subject to minimal regulations, it would discourage capable and ambitious young men from entering medical school. Unfortunately, I feel that the rigid attitude which Dr. Kuenzi appears to typify will bring about the exact situation that he so strenuously desires to avoid.

Health care is a purchasable commodity, and even in the most highly socialized countries, there are variations in the standards of health care that essentially depend upon economic factors and not entirely upon the individual's medical needs. However, most Americans, including many physicians, believe that a certain level of health care is a "right," just as they believe that no American should be allowed to die on the street of starvation. To obtusely deny that it is a "right" and to place it in the category of purchasing a television set or an automobile will only create a situation in which the most extreme regulatory controls will not only be tolerated, but demanded by the American public. Very few physicians would like to see this happen. I think a much more sensible approach would be to agree that health care is a "right," but not a right which the medical profession owes to the American public. It is a "right" which is owed to them by their government.

I would hope that we would organize ourselves to insist that the government provide the public with their rights in a manner most consistent with continuing the high standards of medical care that currently exist. Hopefully, we will be able to combine with consumer groups to insist that the government provide all Americans with a reasonable level of medical care within a framework which does not seriously infringe upon the present freedom of the practitioner of medicine.

It is not the responsibility of the medical profession to devise a solution to this serious social problem, but it is certainly their responsibility to participate in discussions leading to such a solution. Denying that health care is a "right" is denying that such a problem exists. It will not work and can only lead to imposed solutions whose major objectives will be short-term political benefits and not the continuing upgrading of health care for the American public. It is only by recognizing health care as a "right" that we can find a common base of action with important consumer groups and thus exert sufficient pressure upon the government to keep American medicine a viable and attractive profession.

Sincerely,
Arthur L. Prensky, M.D.
Associate Professor of
Pediatrics and Neurology
Washington University School of Medicine
St. Louis, Mo. 63110

ABFP Certification Examination

The American Board of Family Practice announces that it will give its next two-day written certification examination on Oct. 20-21, 1973. It will be held in various centers geographically distributed throughout the United States. Information regarding the examination can be obtained by writing to Nicholas J. Pisacano, M.D., Secretary, American Board of Family Practice, Inc., University of Kentucky Medical Center, Annex #2, Room 229, Lexington, Ky. 40506.

Please Note: It is necessary for each physician desiring to take the examination to file a completed application with the Board office. Deadline for receipt of applications in this office is *Aug. 1, 1973.*

County Society News

FIRST DISTRICT

COUNCILOR
JOHN N. MARTIN, M.D., ST. JOSEPH

Buchanan County Medical Society

A dinner and all-business meeting was held by Buchanan County Medical Society on March 7 in the Empire Room of Hotel Robidoux in St. Joseph.

Dr. E. F. Butler, President, presided at the meeting.

A request for assistance in training ambulance personnel was received from St. Joseph Hospital. The Buchanan County Trauma Committee agreed to undertake training of the ambulance personnel.

Dr. Robert W. Kieber outlined a preceptorship program for Family Practice physicians at Methodist Hospital and Medical Center. The Society voted to endorse a proposed home rule county charter to be placed before Buchanan County voters on March 20.

Mrs. William B. O'Connor, Doctors Day Chairman for the Auxiliary, sent a letter advising the Society that in its honor, the Auxiliary had made more than $1,200 in contributions to the Missouri State Medical Foundation, AMA-ERF and the Medical Library at Missouri Western College.

The Society noted with pleasure that Mrs. Charles R. Willman would be installed as President of the Woman's Auxiliary to the Missouri State Medical Association at the annual session in St. Louis on March 29-April 1.

Mrs. E. F. Butler, Past-President of the MSMA Auxiliary, will be her installing officer.

G. Tyson Carpenter, M.D., *Secretary*

SECOND DISTRICT

COUNCILOR
LYSLE M. BACH, M.D., HANNIBAL

Chariton-Macon-Monroe-Randolph County Medical Society

The regular monthly meeting of Chariton-Macon-Monroe-Randolph County Medical Society was held in the library of Woodland Hospital in Moberly on March 8.

Members present were Drs. F. L. Harms, D. D. Stuart, J. E. Campbell, D. E. Eggleston, F. A. Barnett, J. Baker, W. D. Chute, C. C. Cohrs, P. V. Dreyer, J. W. Fleming, Jr., T. S. Fleming, L. E. Huber, R. V. Tompson and R. H. Young.

Minutes of the previous meeting were read and approved. Dr. Cohrs explained the proposed resolution to the MSMA concerning the recently formed Board of Allergy and the resolution was approved unanimously. The Secretary forwarded information on the Medical Center Spring Clinic to be held in May at the Medical Center and, also, two Blue Shield Board vacancies for the year from this district.

The program was presented by Dr. Larry Henry, Columbia, a pathologist. His subject was "Forensic Pathology." He outlined the basic differences between a medical examiner system and a coroner system and then showed several case presentations to illustrate the role of forensic pathology in differentiating between accidental and homicidal deaths. He also pointed out various unusual causes of death.

Dr. Henry is one of three trained forensic pathologists practicing in the state of Missouri.

Robert V. Tompson, M.D., *Secretary*

EIGHTH DISTRICT

COUNCILOR
HOWARD J. McALHANY, M.D.,
SPRINGFIELD

Jasper County Medical Society

Dr. William D. Mayer, dean of the University of Missouri School of Medicine and director of the University Medical Center, was the guest speaker at the dinner meeting of Jasper County Medical Society at the Twin Hills Golf and Country Club in Joplin on March 13.

Dr. Mayer presented a program on changes in health care at the University and on referral practices.

In addition to Dr. Mayer, Dr. William C. Allen, Associate Professor of Community Health and Medical Practices at the University of Missouri Medical Center, spoke on "Hospital Affiliations" and Dr. Paul R. Young, Medical Director for Continuing Medical Education at the University, discussed "Medical Sabbaticals for Practicing Physicians."

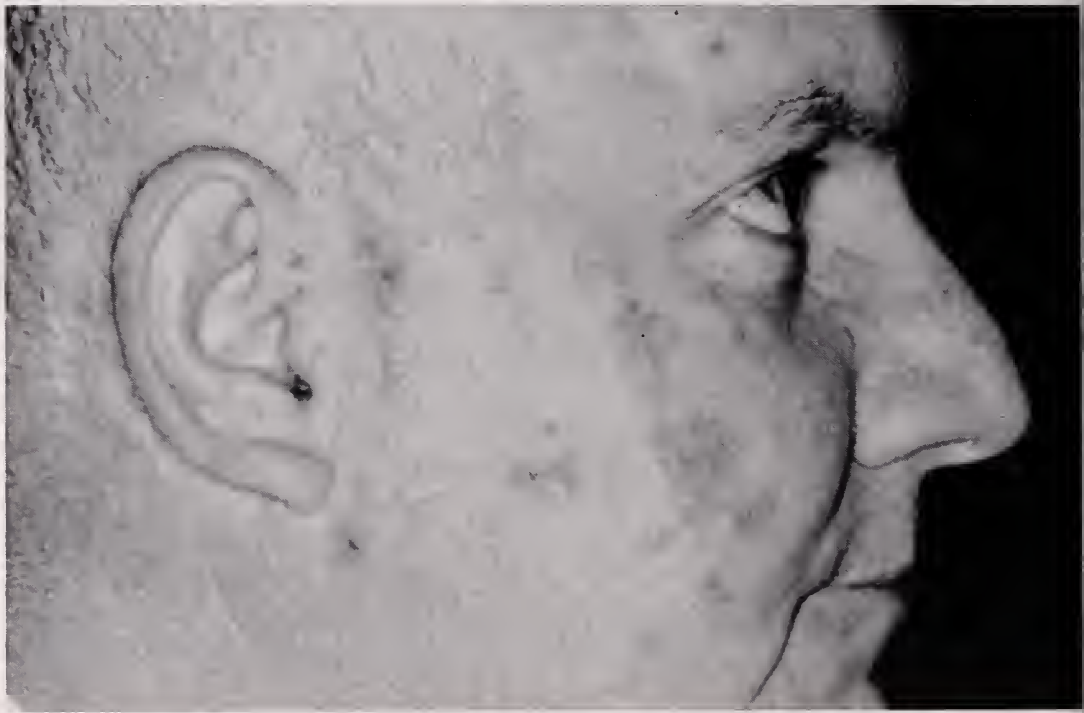
Dr. Howard B. McAlhany, Eighth District Councilor, informed Society members of the 1973 MSMA Annual Session plans.

Howard H. Roberts, M.D., *Secretary*

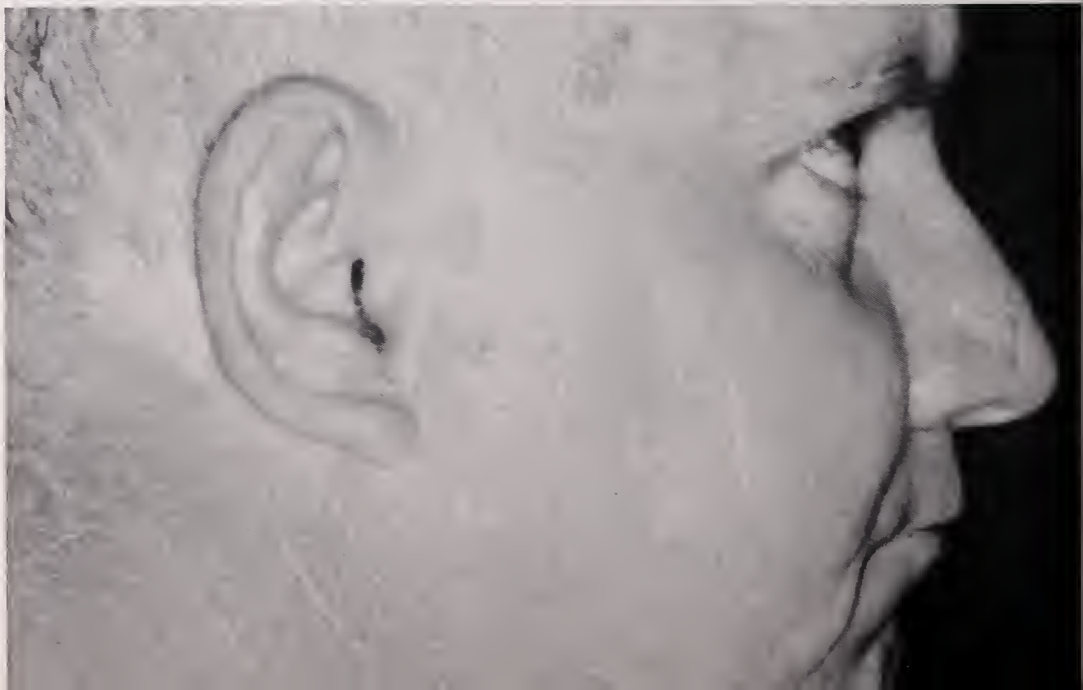
What's on your patient's face...

may be more important than his chief complaint

Patient P.T.* seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual scarring on ridge of nose from previous cryosurgical and electrosurgical procedures.



Patient P.T.* seen on 6/12/67, seven weeks after discontinuation of 5% FU cream. Reaction has subsided. Residual scarring not seen except that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.



*Data on file, Hoffmann-La Roche Inc., Nutley, N.J

he lesions on his face re solar/actinic— o-called “senile” keratoses... nd they may be premalignant.

lar, actinic or senile keratoses

se lesions may be called by several names, but they
ally can be identified by the following characteris-
. The typical lesion is flat or slightly elevated, of a
wnish or reddish color, papular, dry, rough, adherent
l sharply defined. They commonly occur as multiple
ions, chiefly on the exposed portions of the skin.

quence of therapy— lectivity of response

er several days of therapy with Efudex® (fluorouracil),
thema may begin to appear in the area of the lesions;
s reaction usually reaches its height of unsightliness
l discomfort within two weeks, declining after dis-
tinuation of therapy. This reaction occurs in affected
as. Since the response is so predictable, lesions that
not respond should be biopsied.

cceptable results

atment with Efudex provides highly favorable cos-
tic results. Incidence of scarring is low. This is par-
ularly important with multiple facial lesions. Efudex
uld be applied with care near the eyes, nose and mouth.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)-aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

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Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

his patient’s lesions were resolved with

Efudex®

fluorouracil/Roche®

5% cream/solution...a Roche exclusive

New Members

Lata R. Bagwe, M.D., 1056 Willowbrook Dr., St. Louis, has become a member of St. Louis County Medical Society. Dr. Bagwe is a native of Barada, India, received his M.D. degree at Barado Medical College in 1964. He specializes in obstetrics and gynecology.

Ronald G. Benson, M.D., 900 E. Cherry, Springfield, has become a member of Greene County Medical Society. Dr. Benson is a native of Jefferson City, received his preliminary education at Westminster College and his M.D. degree at the University of Missouri in 1966. He specializes in obstetrics and gynecology.

Charles A. Clough, M.D., 4320 Wornall Rd., Kansas City, has become a member of Jackson County Medical Society. Dr. Clough is a native of Oklahoma City, Okla., received his preliminary education at the University of Oklahoma and his M.D. degree at the University of Oklahoma in 1959. He specializes in neurological surgery.

LeRoy J. Dierker, M.D., Cricklewood Pl., St. Louis, has become a member of St. Louis County Medical Society. Dr. Dierker is a native of Lawrence, Neb., received his preliminary education at St. Louis University and his M.D. degree at St. Louis University in 1942. He specializes in anesthesiology.

Reinhold Engleman, M.D., 1002 Walnut, Kansas City, has become a member of Jackson County Medical Society. Dr. Engleman is a native of Indiana, received his preliminary education at Indiana State University and his M.D. degree at Washington University in 1943. He specializes in insurance medicine.

Jack Maurice Gniwesch, M.D., 8679 Spoon Dr., St. Louis, has become a member of St. Louis County Medical Society. Dr. Gniwesch is a native of Belgium, received his preliminary education at Rabbinical Seminary and his M.D. degree at St. Louis University in 1968. He specializes in general surgery.

Oscar Hantz, M.D., 1125 Graham Rd., Florissant, has become a member of St. Louis County Medical Society. Dr. Hantz is a native of Argentina, received his preliminary education at Colegio Menserrat and his M.D. degree at Cordoba University in 1961. He specializes in otorhinolaryngology.

Bruce J. Hookerman, M.D., 1207 Oxford Hill Court, St. Louis, has become a member of St. Louis County Medical Society. Dr. Hookerman is a native of Philadelphia, Pa., received his preliminary education at Dartmouth College and his M.D. degree at St. Louis University in 1968. He specializes in dermatology.

Richard D. McLaughlin, M.D., 117 Professional Bldg., Springfield, has become a member of Greene County Medical Society. Dr. McLaughlin is a native of Iowa, received his preliminary education at Kansas State University and his M.D. degree at Kansas University in 1965. He specializes in obstetrics and gynecology.

Jose Navato, M.D., 938 Brookvale Terr., Manchester, has become a member of Jefferson County Medical Society. Dr. Navato is a native of the Philippines, received his preliminary education at the University of the Philippines and his M.D. degree at the University of the Philippines in 1955. He specializes in psychiatry and is in general practice.

David L. Ohlms, M.D., 35 N. Central, St. Louis, has become a member of St. Louis County Medical Society. Dr. Ohlms is a native of St. Charles, received his preliminary education at St. Mary's University and his M.D. degree at the University of Texas in 1968. He specializes in psychiatry.

Agatha Lee Park, M.D., 111 Church St., St. Louis, has become a member of St. Louis County Medical Society. Dr. Park is a native of Seoul, Korea, received her preliminary education at Yonsei University and her M.D. degree at Severance Medical College Yonsei University in 1963. She specializes in dermatology.

James Milton Pickens, M.D., 807 Stadium Dr., Columbia, has become a member of Boone County Medical Society. Dr. Pickens is a native of Texas, received his preliminary education at the University of Texas and his M.D. degree at the University of Texas in 1956. He specializes in pediatrics and neurology.

Antonio S. Racela, Jr., M.D., Linwood Blvd. at Prospect, Kansas City, has become a member of Jackson County Medical Society. Dr. Racela is a native of the Philippines, received his preliminary education at the University of the Philippines and his M.D. degree at the University of the Philippines in 1963. He specializes in pathology.

William A. Shipley, M.D., 807 Stadium, Columbia, has become a member of Boone County Medical Society. Dr. Shipley is a native of St. Louis, received his preliminary education at Southern Illinois University and his M.D. degree at the University of Iowa in 1967. He specializes in radiology.

Gritte Supattanasiri, M.D., 128 W. Russell, Ironton, has become a member of Mineral Area County Medical Society. Dr. Supattanasiri is a native of China, received his preliminary education at Pre-Medical Science and his M.D. degree at Chieng Mai in 1964. He specializes in general surgery.

William Louis Traxel, M.D., 623 Pine Blvd., Poplar Bluff, has become a member of Butler-Wayne-Ripley County Medical Society. Dr. Traxel is a native of Maysville, Ky., received his preliminary education at Northwestern University and his M.D. degree at Vanderbilt University in 1965. He specializes in ophthalmology.

D. K. Varma, M.D., 215 Oak, Poplar Bluff, has become a member of Butler-Wayne-Ripley County Medical Society. Dr. Varma is a native of India and received his preliminary education at K. P. College and his M.D. degree at Nagpur University in 1955. He specializes in internal medicine and pulmonary disease.

Jasper Wakeman, Jr., M.D., 406 Professional Bldg., Springfield, has become a member of Greene County Medical Society. Dr. Wakeman is a native of Springfield, received his preliminary education at the University of Missouri and his M.D. degree at the University of Missouri in 1964. He specializes in orthopedic surgery.

Arlen D. Winsky, M.D., 226 Professional Bldg., Springfield, has become a member of Greene County Medical Society. Dr. Winsky is a native of Newton, Kan., received his preliminary education at Bethel College and his M.D. degree at the University of Kansas in 1963. He specializes in plastic surgery.

Dolores P. Wolff, M.D., #3 Tuscany Park, St. Louis, has become a member of St. Louis County Medical Society. Dr. Wolff is a native of St. Louis, received her preliminary education at Washington University and her M.D. degree at Washington University in 1959. She specializes in anesthesiology.

Thomas Owen Woods, M.D., 621 Pine, Poplar Bluff, has become a member of Butler-Wayne-Ripley County Medical Society. Dr. Woods is a native of Parkin, Ark., received his preliminary education at Centenary College of Louisiana and his M.D. degree at the University of Arkansas in 1966. He is in general practice.

In Memoriam

Robert R. Glynn, M.D., 1211 S. Glenstone, Springfield, a graduate of Rush Medical College, 1915; member Greene County Medical Society; age 81; died Feb. 9, 1973.

Thomas Ciampa, M.D., 777 S. Ballas Rd., St. Louis, a graduate of Tulane University, 1950; member St. Louis County Medical Society; age 53; died Feb. 23, 1973.

Foster A. Dill, M.D., 7346 Manchester Ave., St. Louis, a graduate of St. Louis University, 1927; member St. Louis County Medical Society; age 81; died March 1, 1973.

Andrew G. Klein, M.D., 2959 Milton Blvd., St. Louis, a graduate of St. Louis University, 1933; member St. Louis Medical Society; age 67; died March 3, 1973.

William E. Moore, M.D., 7315 Pasadena Blvd., Normandy, a graduate of St. Louis University; member St. Louis County Medical Society; age 63; died March 9, 1973.

Joseph B. Cowherd, M.D., 634 W. 69th Terr., Kansas City, a graduate of Columbia University, 1909; member Jackson County Medical Society; age 87; died March 18, 1973.

LEO H. POLLOCK, M.D.

Missouri Medicine in Review

FORTY YEARS AGO

The 76th Annual Meeting of the Missouri State Medical Association will convene on May 1-4 in Kansas City with all sessions and headquarters at the President Hotel. Four guest speakers will deliver addresses at the session. Each is well versed in his specialty and a recognized authority. The speakers are Dr. Charles A. Elliott, Chicago, Professor of Medicine, Northwestern University Medical School; Dr. Peter C. Kronfeld, Chicago, Associate Professor of Ophthalmology, Graduate School of Medicine of the Division of the Biological Sciences, University of Chicago; Dr. J. Gordon Wilson, Chicago, Professor of Otology and Laryngology, Northwestern University Medical School; and Dr. Arnold S. Jackson, Madison, Wis., a member of the Jackson Clinic and attending surgeon at the Methodist Hospital.

Although the Legislature is still in session as we go to press, we can announce the disposition of some of the bills we supported or opposed. The principal measure that we supported was HB 282, a lien law for physicians and hospitals. The bill passed the House with a good majority, but struck an unanticipated snag in the Senate. The opposition, it is said, emanated from insurance companies and a certain class of attorneys. Toward the close of the session, an important measure was passed which removed all restrictions on the prescribing of alcoholic liquors by licensed physicians. This is HB 664, which makes it lawful for any reputable physician to prescribe alcoholic liquor in such quantities and with such frequency and dosages as, in his judgement, the needs of his patient may require.

In the Oct. 15, 1932 issue of the *Journal of the AMA*, Burrill B. Crohn, Leon Ginzburg and Gordon D. Oppenheimer, New York, describe, in its pathologic and clinical details, a disease of the terminal ileum affecting mainly young adults, characterized by a subacute or chronic necrotizing and cicatrizing inflammation. The disease is clinically featured by symptoms that resemble those of ulcerative colitis, namely, fever, diarrhea and emaciation, leading eventually to an obstruction of the small intestine. The constant occurrence of a mass in the right iliac fossa usually requires surgical intervention (resection). The terminal ileum is involved alone. The etiology of the process is unknown; it belongs to none of the categories of recognized granulomatous or accepted inflammatory groups. The course is relatively benign, all the patients who survive operation being alive and well.

TWENTY-FIVE YEARS AGO

Wallis Smith, M.D., Springfield, was elected President-Elect of the Missouri State Medical Association at its 90th Annual Session in St. Louis on March 14-17. He will serve in his present capacity until the next Annual Session when he will be installed as President.

Dr. Smith brings to his new office much ability and experience in organized medicine. He has served the Association and the Greene County Medical Society throughout his years in the practice of medicine and many times has proved his unfaltering interest in the betterment of medical practice and the health of the people. Dr. Smith was graduated from Drury College in Springfield in 1908 after which he entered Rush Medical College, which was affiliated with the University of Chicago at that time.

Drew Luten, M.D., St. Louis, was elected president of the Missouri Branch of the American Heart Association at a meeting on March 16. Other officers elected are A. Graham Asher, M.D., Kansas City, vice-president and C. Braxton Davis, Nevada, secretary.

Between July 18, 1947 and Jan. 1, 1948, 15,600 veterans have been examined or treated by "hometown physicians," who received $242,700 from the Veterans Administration. "There were no complaints and no charges of any kind against any physicians in the state of Missouri." This is on the authority of a "top-drawer" representative of the Veterans Administration.

The Carter-Shannon County Medical Society met in the Hyde Building in Eminence on Feb-

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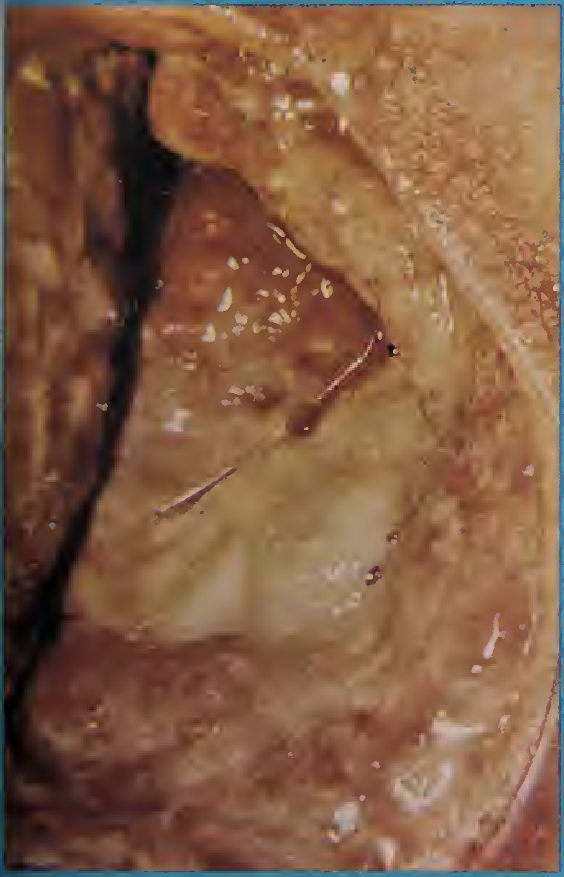
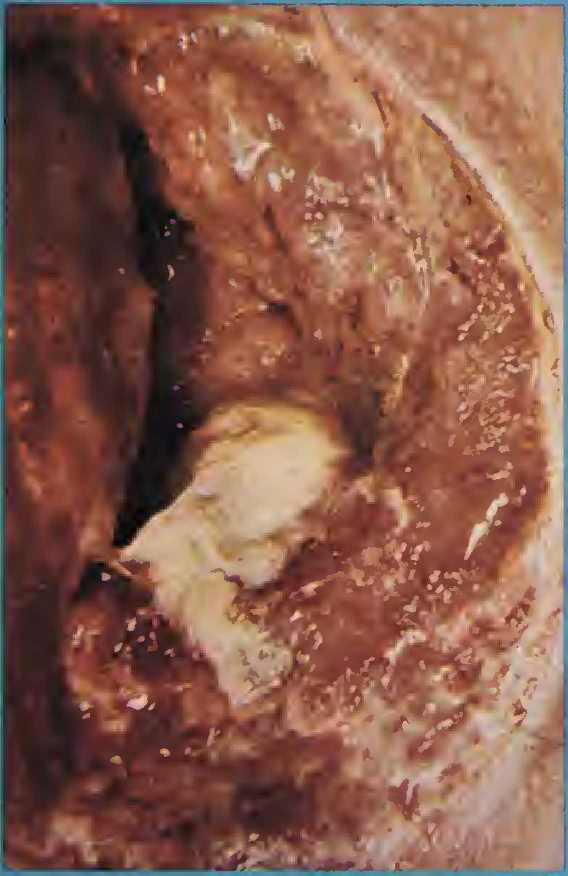


Before treatment, necrotic matter coated the inner surfaces of this decubitus ulcer.



After six days of TRAVASE therapy, debridement is nearly complete and granulation evident.

tive Therapy—Observe Its Effects in 48 hours
he recommended nursing technique is
d without deviation, this procedure can
te visible improvement within 48 hours of
ent. If no dissolution of slough occurs by then,
application is unlikely to be rewarding
k for break in procedure, usually due to use
nsing or antiseptic agents which impair the
eness of the enzyme in TRAVASE).

observation and photos by Kathleen Brough
M.D., Marion County Home, Indianapolis, Ind.

see next page for prescribing information

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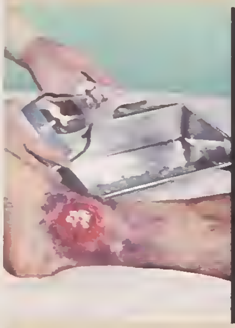
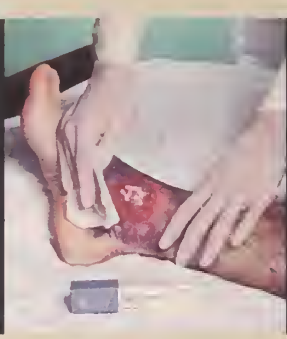
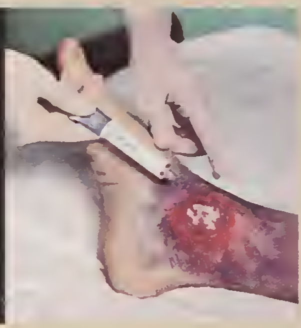


Jlcer being irrigated) horoughly cleanse and rigate the wound area using nly sterile water or sodium hloride solution. Be sure to leanse the wound of any ntiseptics or heavy-metal ntibacterial agents which iay interfere with the nzyme activity.



Thoroughly soak the wound area. Where practical, tubbing or showering is suitable. Or wet soaks with gauze pads may be used. Remember to avoid chemical cleansing agents which may interfere with the therapy.



With a sterile cotton swab or finger cot, apply a very thin layer of TRAVASE Ointment. The ointment spreads easily and only a small amount is needed (a small dab of ointment will cover an area as big as the back of a hand).

Be sure, though, to rub the ointment well into every crack or crevice of the wound and overlap the surrounding skin one-fourth to one-half inch beyond the area to be debrided—to be sure of complete coverage.

\pply loose, wet dressings, horoughly soaked in sodium :hloride solution or sterile vater to the area to be lebrided only.

Cover the moist dressings with an occlusive wrap (Saran wrap, Telfa Pads, or other plastic wrappings) to keep wound site moist. Do not extend occlusive wrap over ½ inch beyond area to be debrided.

When changing dressing, gently wipe away the dissolved material. Repeat the complete dressing procedure, including application of TRAVASE Ointment, four times daily.

The ulcer shown in these photos is simulated on a model in order to demonstrate he correct TRAVASE application technique.

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ACTION: TRAVASE Ointment selectively digests necrotic soft ti proteolytic action. It dissolves and facilitates the removal of ne tissues and purulent exudates that otherwise impair formation granulation tissue and delay wound healing (4).

At body temperatures these proteolytic enzymes have optimal the pH range from 6.0 to 6.8.

INDICATIONS: For wound debridement (1,2)—TRAVASE Ointm indicated as an adjunct to established methods of wound care biochemical debridement of the following lesions:

Second and third degree burns,
Decubitus ulcers,
Incisional, traumatic, and pyogenic wounds,
Ulcers secondary to peripheral vascular disease.

CONTRAINDICATIONS: Application of TRAVASE (brand of suti Ointment is contraindicated in the following conditions:

Wounds communicating with major body cavities,

Wounds containing exposed major nerves or nervous tissu

Fungating neoplastic ulcers,

Wounds in women of child-bearing potential—because of l laboratory evidence of effects of TRAVASE upon the deve

WARNING: Do not permit TRAVASE Ointment to come into co the eyes. In treatment of burns or lesions about the head or n the ointment inadvertently come into contact with the eyes, th be immediately rinsed with copious amounts of water, preferat

PRECAUTIONS: A moist environment is essential to optimal ac enzyme. Enzyme activity may also be impaired by certain ager several detergents and antiseptics (benzalkonium chloride, hexachlorophene, iodine, and nitrofurazone) may render the s indifferent to the action of the enzyme (3). Compounds such a containing metallic ions interfere directly with enzyme activity slight degree, whereas neomycin, sulfamylon-streptomycin, an do not affect enzyme activity. In cases where adjunctive topic has been used and no dissolution of slough occurs after treat TRAVASE Ointment for 24 to 48 hours, further application, bec interference by the adjunctive agents, is unlikely to be reward

In cases where there is existent or threatening invasive infect appropriate systemic antibiotic therapy should be instituted cc

Although there have been no reports of systemic allergic reac humans, studies have shown that there may be an antibody re humans to absorbed enzyme material.

ADVERSE REACTIONS: Adverse reactions consist of mild, tra paresthesias, bleeding and transient dermatitis. Pain usually c controlled by administration of mild analgesics. Side effects s enough to warrant discontinuation of therapy occasionally hav

If bleeding or dermatitis occurs as a result of the application (brand of sutilains) Ointment, therapy should be discontinued. toxicity has been observed as a result of the topical applicati TRAVASE Ointment.

Dosage and Administration

STRICT ADHERENCE TO THE FOLLOWING IS REQUIRED FO RESULTS OF TREATMENT

1. Thoroughly Cleanse and Irrigate Wound Area with so or water solutions. Wound **MUST** be cleansed of anti heavy-metal antibacterials which may denature enzym substrate characteristics (e.g., Hexachlorophene, Silv Benzalkonium Chloride, Nitrofurazone, etc.).
2. Thoroughly moisten wound area either through tubbi or wet soaks (e.g., sodium chloride or water solution
3. Apply TRAVASE Ointment in a thin layer assuring int with necrotic tissue and complete wound coverage e ¼ to ½ inch beyond the area to be debrided.
4. Apply loose wet dressings.
5. Repeat entire procedure 3 to 4 times per day for bes

How Supplied

3P3002 TRAVASE Ointment is supplied sterile in one-half o (14.2 g.) containing 82,000 casein units of sutilains hydrophobic ointment base.

The ointment must be stored under refrigeration at 2° to 10° (35° to 50° F).

References

1. Garrett, T. A. **Bacillus subtilis** protease, a new agent for d Clin. Med. 76: 11-15, 1969.

2. Hesterberg, R. (Necrosis treatment on fermentative basis). dissertation from the Chirurgical Clinic of the University of M Dissertation Printing: Charlotte Schoen, Munich, 1964. (Ger.)

3. Howes, E. L. The healing of the burn may be hindered by therapy. 20th Cong. Soc. Inter. Chir., Rome, Italy, September

4. Prytz, B., Connell, J. F., Jr., and Rousselot, L. M. **Bacillus** protease in the digestion of burn eschar. Clin. Pharmacol. Th 347-51, 1966.

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*A casein unit is the amount of enzyme required to produce optical density at 275 mμ as that of a solution of 1.5 mcg. l after the enzyme has been incubated with 35 mg. of casein one minute.

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ruary 24. The meeting convened at 2 PM with Frank Hyde, M.D., presiding. The following members were present: Harry Rollins, M.D., Winona; T. W. Cotton, M.D., Van Buren; Frank Hyde, M.D. and W. T. Eudy, Eminence. Dr. Cotton presented the case history of Addison's disease which was discussed by Drs. Hyde and Rollins.

New books available include the following:

Urology in General Practice by Nelse F. Ockerblad, B.S., M.D., F.A.C.S.; Professor of Clinical Urology, University of Kansas School of Medicine; Senior Attending Urologist to St. Luke's Hospital; Consulting Urologist to the Children's Mercy Hospital, Kansas City; Diplomate of the American Board of Urology. The Year Book Publishers, Inc., Chicago, 1947. Price, $5.75.

Methods of Diagnosis by Logan Clendening, M.D., late Professor of Clinical Medicine and History of Medicine, University of Kansas School of Medicine, and Edward H. Hashinger, M.D., Professor of Clinical Medicine, University of Kansas School of Medicine. With 143 illustrations. The C. V. Mosby Company, St. Louis, 1947. Price, $12.50.

TEN YEARS AGO

The House of Delegates at the 105th Annual Session of the MSMA elected Leonard T. Furlow, M.D., St. Louis, as President-Elect. He will be installed as President at the annual meeting in St. Louis in the spring of 1964.

Kenneth C. Hollweg, M.D., Kansas City, was installed as President.

Dr. Furlow has been a member of the MSMA since 1934 and has served on its Council as both a member and as Chairman (1962). He also is president of the Missouri State Medical Foundation.

In 1932, Dr. Furlow accepted a fellowship in neurological surgery with Dr. Ernest Sachs at Barnes Hospital. Upon completion of his training, he became associated with Dr. Sachs in the practice of neurological surgery and has advanced to the position of Associate Professor of Clinical Neurological Surgery at Washington University School of Medicine and Barnes Hospital.

Other officers elected were Drs. John I. Matthews, Jefferson City, Secretary and Charles R. Doyle, St. Louis, Treasurer. Drs. M. K. Underwood of Rolla, Carl R. Ferris of Kansas City and Paul F. Max of St. Louis were elected as Vice-Presidents.

The 15th Annual Scientific Assembly of the American Academy of General Practice is now history. This outstanding affair was held at McCormick Place in Chicago on April 1-4, 1963 with the Congress of Delegates meeting at the Palmer House on March 30-April 1. As might be expected and probably was, the attendance did not match that of the 1962 session held in that intriguing spot known as Las Vegas. However, this 15th Annual Meeting will be remembered as one of the outstanding annual sessions to date. A number of important decisions were reached by the Congress of Delegates, one of which included the rejection of the creation of a Board of General Practice.

Ye Editor notes the following in his "40 Years Ago" column:

"With the completion and occupancy on March 1 of the modern and beautiful new St. Luke's Hospital in Kansas City, Mo., the institution and organization enter upon a new and promising era. Historically, the hospital is 25 years old, having its origin under the sponsorship of the late Bishop Edward R. Atwill, Dr. Herman E. Pearse and Miss Elanore Keeley, who was the first superintendent. The prices and fees for beds and service rendered have been standardized and made to meet the needs and ability to pay of all classes. Beds in the larger wards are $2.50 per day; in the two-bed wards, $4. The private rooms vary in price from $5 to $15 per day, the latter being suites of bedroom, sitting room, special bath, toilet and closet."

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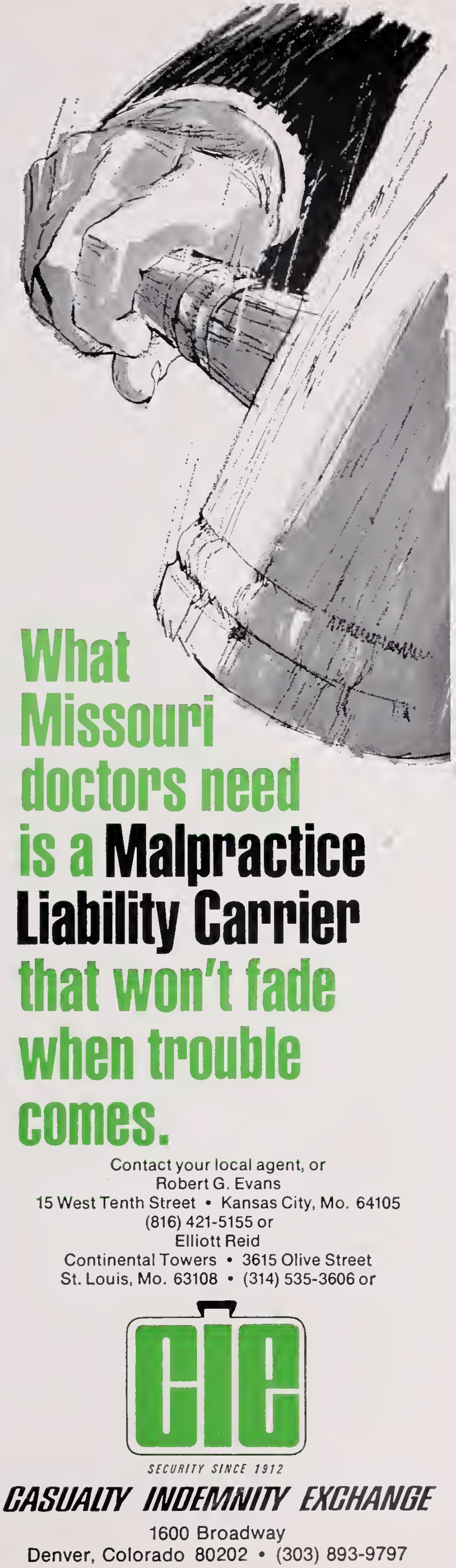

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Precautions: In the elderly and debilita
and in children over six, limit to smallest effec
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Nutley, N.J. 07110

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) ***Children:*** 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

Valium®
(diazepam)

To help you manage excessive psychic tension

IN ASTHMA
IN EMPHYSEMA

optional therapy

THE mudranes

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

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First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

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During pregnancy or when K.I. is contraindicated or not tolerated

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A counterpart for Mudrane-2

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Missouri Medicine

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Illustrations should be glossy prints or drawings in India ink on white paper. They should not be mounted and name of author and figure number should be penciled lightly on the backs. Legends should appear on a separate sheet. Colored illustrations will be used when suitable if author assumes the actual cost.

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acute arthritic inflammation...heat that freezes

In acute rheumatoid arthritis consider Tandearil. The anti-inflammatory action of Tandearil quickly helps reduce heat, pain, swelling, and stiffness. Results are usually seen in 3 or 4 days. Try it for a week when the symptoms defy aspirin control.

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oxyphenbutazone NF

Geigy

Tablets of 100 mg.
Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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For complete details, including dosage, please see full prescribing information.

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Opinion & Dialogue

"Prescription drugs – who should determine the maker?"

Dispenser of Medicine

Clifton J. Latiolais
President
American
Pharmaceutical
Association

Maker of Medicine

C. Joseph Stetler
President
Pharmaceutical
Manufacturers
Association

"Too many doctors are in
ent to the economic conseque
their decisions." So stated a re
issue of *Medical News Report*
cember 4, 1972), an independ
weekly newsletter published by
AMA Chief Executive F. J. L. Bl
game, M.D.

Doctor, are you indifferent...?

In discussing an anticipa
crease in Blue Shield rates, Dr
ingame's newsletter had this to

"In general, it can be said
have given the impression they
not particularly concerned wit
increase in cost of health care
patients...

"True, an MD's training is
marily scientific, but in the rea
of practice, all of his scientific
sions have a price tag, or an ec
impact. The economics of hea
beckon the practitioner's atter
Concern for economics of me

When the pharmacist rec
mends that a drug product oth
the one ordered be dispensed,
prescriber invariably permits t
change when he feels the best
ests of the patient will be serve

Shortcomings of Pro-Substituti Argument

The fact remains that it is
sary for the prescriber to know
the change is being contempla
and to be in a position to conse
demur. Without that opportuni
unilateral decision of the pharr
made in the absence of clinical
edge of the patient, could expo
to needless risks, and in additic
jeopardize the relationship bet
the professions of Pharmacy ar
Medicine. In my view, there is r
in the pro-substitution argume
offsets these risks.

The Issue of Drug Knowledge

Substitution advocates cla
that the primary justification fo
changing the rules is the desire
better utilize pharmacists' kno
about drugs. Yet the pharmacis
task to keep current on the enti
field of drug therapy, to some c
puts him at a disadvantage. Mc
often, a practicing physician wi
expert knowledge of no more th

Advertisement

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edical societies ought to con-
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habitually hospitalize patients
convenience of the MD. It's
se to deny such habits exist...
Doctors, thru their medical so-
have unhesitatingly appealed
patients for support in the
ainst government interference
e private practice of medicine.
e public in the past has re-
d. It's time the American Med-
sociation and state and local
l societies paid off the debt by
e action to hold down the cost
ical care."

Drugs

nsurance rates and hospital
s are only two factors in health care costs. The cost of drugs—both prescription and nonprescription—is another.

And when it comes to drug costs, the nation's pharmacists *are concerned*. Through their national professional society, the American Pharmaceutical Association, pharmacists are advising the public to use nonprescription medication cautiously and conservatively, and to seek the advice of their pharmacist before selecting or purchasing such drugs.

Outdated Laws

The pharmacist also is aware that when it comes to prescription drugs, often he has an even greater opportunity to reduce the cost to the patient—with no sacrifice in the quality of the medication dispensed. But in many states, outdated and antiquated laws prevent the pharmacist from engaging in drug product selection. "Drug product selection" simply means that the pharmacist functions in the patient's interest by consciously choosing, from the multiple brands available, a low-cost quality brand of the specific drug to be dispensed in response to the physician's prescription order.

Much *misinformation* has been purposely spread by those who stand to gain financially by maintaining high drug costs to the public. An endless stream of propaganda has emanated from the drug industry in an effort to persuade the medical profession that these so-called anti-substitution laws should be retained. And as long as these laws are retained, the drug industry will continue its current marketing practices which contribute unnecessarily to high drug costs to patients. These practices also are inviting government agencies to expand their restrictive controls on physicians and pharmacists.

APhA Efforts

As pharmacists, we are concerned about health care costs. We hope that every physician shares our concern on this vital issue, and will give his personal support to the constructive efforts APhA has undertaken in the interest of all patients.

(For a complete discussion of drug product selection, you are invited to request a free copy of the "White Paper on the Pharmacist's Role in Product Selection" from: American Pharmaceutical Association, 2215 Constitution Avenue, N.W., Washington, D.C. 20037.)

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lrugs that he selects to treat the
ty of conditions encountered in
ictice. Moreover, the physi-
choice of a specific brand is
on his knowledge of the pa-
medical history and current
ion, and his experiences with
rticular manufacturer's
ct.

Some substitution proponents
ırgued that the dispensing of a
ription is a simple two-party
ıction between the pharmacist
ıe patient, and that a substitut-
ıarmacist may avoid even a
ical breach of contract by simply
ing the patient that he is making
ıbstitution. I would judge that
ourts would be sympathetic
d a pharmacist who substituted
ut physician approval and who
took a legal defense that seeks
ke the patient responsible for
ıarmacist's actions.

ced Prescription Prices?

Substitution advocates are
esting to the consumer, and par-
ırly the consumer activist, that
ced prescription prices could
v legalization of substitution.
ave seen absolutely no evidence
tify this claim. To the contrary,
rience in Alberta, Canada, where
titution is authorized, suggests the opposite.

Many pharmacists understandably are concerned about the cost of maintaining multiple stocks of similar products. While there is no doubt that inventory costs rise when additional brands are stocked, it would be interesting to know how much they rise, and how many pharmacists actually stock *all* brands—of, say, ampicillin or tetracycline—or how long they keep "slow moving" products on their shelves before they are returned for credit. To ask that the industry eliminate multiple sources is to ask competitors to stop competing.

Drug Substitution—A License for the Unethical

Anti-substitution repeal would favor "corner cutting" pharmacists and manufacturers. For them, free substitution would be not a right, but a license. As an aftermath, it is quite likely that the confidence of both physicians and patients in the profession of Pharmacy would be eroded, as revelations about the unconscionable behavior of an undisciplined few were magnified in the press or in professional circles.

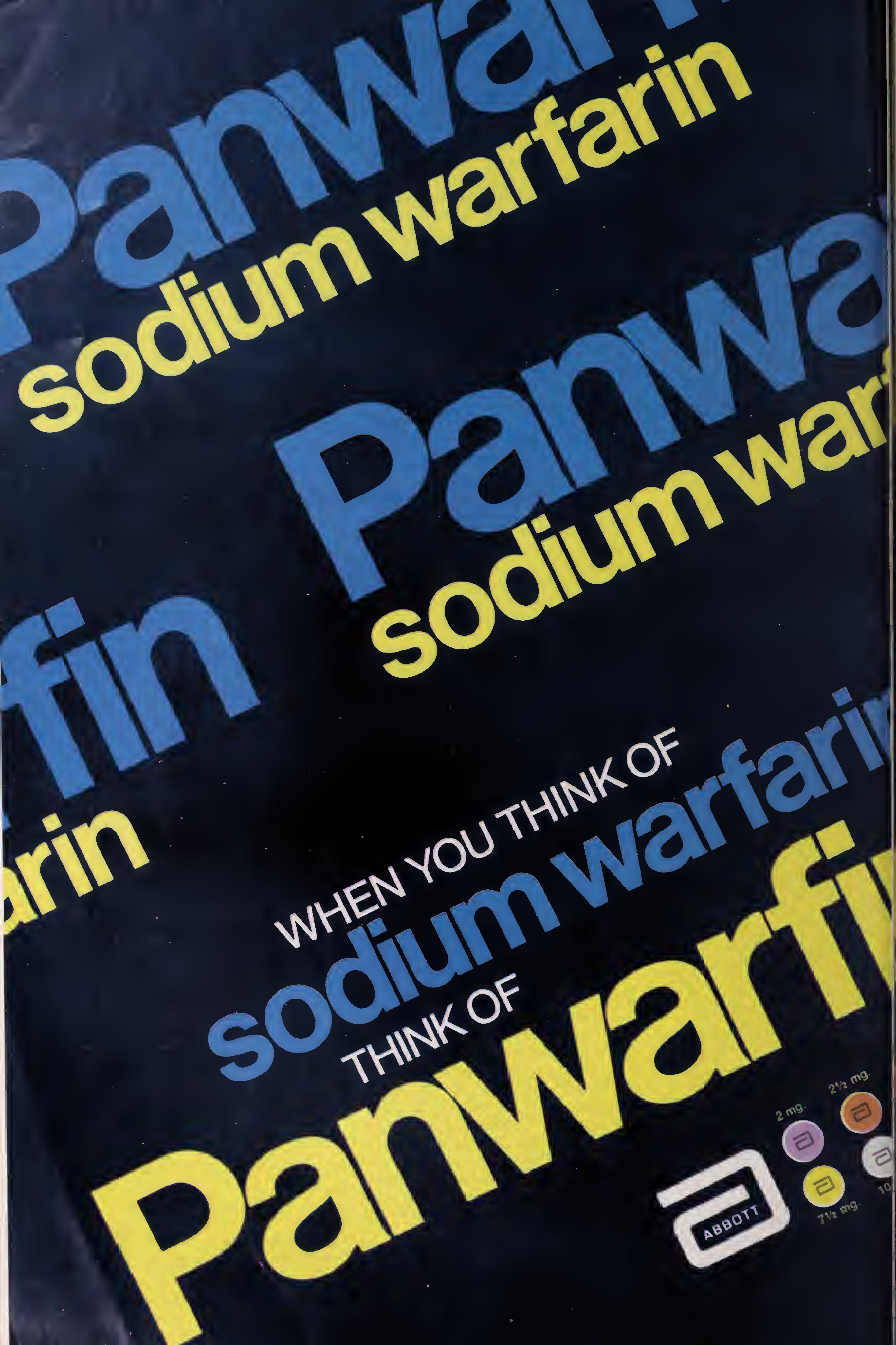
Summary

In short, what the American Pharmaceutical Association advocates as a broad-spectrum panacea looks to us to be not only a minority view (advocacy of substitution is by no means a uniform policy in Pharmacy), but also an extraordinarily costly and ineffective remedy, whose side effects are odious. We believe (1) that an impressive majority of pharmacists prefer to work with Medicine and with industry, for the consumer, and for the general good, (2) that they seek the privilege to substitute when the patient might gain and when the patient's doctor agrees, and (3) that they seek to work for the resolution of genuine grievances openly and professionally.

(For amplification of PMA views, please write for our booklet, "The Medications Physicians Prescribe: Who Shall Determine the Source?" It is available from: Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.)

*Pharmaceutical
Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005*

PMA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WHEN YOU THINK OF
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THINK OF
Panwarfin
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2 mg.
2½ mg.
7½ mg.
10

MSMA

NEWS

ROUND - UP

JUNE, 1973

MSMA occupies new Headquarters

With remodeling work nearly completed, the Missouri State Medical Association has oved into its new Headquarters at 113 Madison Street in Jefferson City.

The Association purchased the four-story structure last fall and extensive renovation ork was done during the winter. The interior of the building was completely modernized hile the exterior, upon completion, will be restored to blend with the historic nature of the rea.

The building is one of three identical structures built by former Governor B. Gratz Brown in 1871. The other two structures are occupied by the Cole County Historical Society nd the Associated General Contractors of Missouri.

Governor Brown resided in the structure now occupied by the Historical Society while he present Governor's Mansion was being constructed across the street. He moved into he present Mansion in 1873.

The site of the new MSMA Headquarters, although part of Jefferson City and Missouri history, is advantageously located in the heart of the State Government Complex. Directly across from the Governor's Mansion, the new Headquarters is within two blocks of the State Capitol and other state agency offices.

Featuring carpeting and air-conditioning throughout, the building has been redecorated with the generous utilization of coordinated and contrasting paneling and office furniture.

The Board Room, work room and store rooms are reached both from the walkout level at the rear of the building and down a short flight of steps from the front entrance.

The second and third stories of the building feature private offices, secretary desks and restrooms. The fourth floor is currently used for storage but could be transformed into expansion office space if needed.

Physicians visiting the Headquarters will be within walking distance of most state government agencies.

The telephone number of the MSMA remains 314-636-5151.

A future issue of MISSOURI MEDICINE will feature a picture section on the new Headquarters.

MSMA members are urged to drop by their new Headquarters when they next visit the Capital City.

uncilors elected

lected to the MSMA ncil during the 115th ual Session were t to right) Drs. ene T. Hansbrough, n District; Lysle M. h, 2nd District; Rob- E. Bregant, 5th Dis- t; Howard J. McAl- y, 8th District; Wil- n D. Bradshaw, 6th trict; and Louis P. lage, 4th District.

Students earn Merit Awards from MSMA

Three graduating medical students were recently presented the Missouri State Medical Association's Merit Award.

The MSMA Award, which consists of a certificate and a savings bond, is presented annually to the graduating student with the highest scholastic ranking in each of Missouri's medical schools. The medical school at the University of Missouri-Kansas City deferred all awards for its first graduating class but is expected to participate beginning next year.

Receiving the 1973 awards were Alan Charles Moses, M.D., St. Louis, Missouri, Washington University School of Medicine; Louis E. Schroder, Jr., M.D., Cincinnati, Ohio, St. Louis University School of Medicine; and Stephen Theodore Brown III, M.D., St. Joseph, Missouri, University of Missouri-Columbia School of Medicine.

Seven MSMA members on State CHP

Gov. Christopher S. Bond recently named seven members of the MSMA to the Governor's Advisory Council on Comprehensive Health Planning.

Those appointed are C. Howe Eller, M.D., and C. Reed Boles, M.D., both of St. Louis County; E. Grey Dimond, M.D., Kansas City; James Dexter, M.D., Columbia; Herbert Domke, M.D., Jefferson City; Phillip W. Carr, M.D., Springfield; and J. W. Fleming, M.D., Moberly.

50-Year Club 'happily' has no duties - just fun

Does "74 to 100" mean anything to you?

It did to those 24 physicians attending the annual meeting of the 50-Year Club of the Missouri State Medical Association. The meeting was held in conjunction with the MSMA 115th Annual Session.

The age span of those present ranged from 74-years-old to 100-years-old and, according to Armand D. Fries, M.D., President of the group, each physician was asked to say a few words after a general discussion topic of "trivia." Dr. Fries, who in true democratic sense was informed two weeks before the meeting that he was President, said the organization "happily" has no duties to perform and no power — therefore, everyone present had a fine time.

Those present were Drs. William Olmsted, George V. Feist, Clinton Kleinschmidt, Thos. B. Hall, Leo P. FitzGerald, Theo. H. Hanser, Maurice Lonsway, Sr., Ellsworth Kneal, Harry C. Lapp, John W. William, H. H. Kramolowsky.

W. H. Walters, Clinton W. Lane, J. Paul Altheide, John F. Rutledge, R. Graham Fick, J. H. McCurry, C. E. Gilliland, Fred W. Teiber, Arthur D. Knabb, Edgar W. Spinzig, Paul Lowenstein, Robert Mueller and Armand D. Fries.

George H. Ladyman, M.D.........PSRO ta

Interest, concern in PSRO draw 103 physicians to TAP

Growing interest and concern in the much-d cussed PSRO issue was evidenced May 11-13 more than 100 physicians turned out for the T Institute at the Lake of the Ozarks.

Although Professional Standards Review Orga izations represented only a part of the TAP agenc it was the underlying issue for most of the progra

Along with 103 physicians, 200 hospital admi istrators and 63 hospital trustees attended the me ing. George H. Ladyman, M.D., of Poplar Blu Chairman of the MSMA Commission on Continui Education and Health Manpower, was the offici MSMA representative at the meeting. Dr. Ladym also gave the welcoming address.

The Institute, put on by the Joint Commissi on Accreditation of Hospitals, was cosponsored the MSMA and the Missouri Hospital Associatio

Charles M. Jacobs, J.D., assistant director JCAH, told the audience that if the private sec fails to set up an acceptable PSRO system, it be forced to take a "package form" system devis by the government. However, Jacobs added that a viable PSRO system is established by the priva sector prior to the federal deadline, the governme may approve that system.

Promotion ads criticized

The AMA Judicial Council recently rea firmed its opinion that a physician who pe mits his name and photograph to be used advertising promotion is acting contrary the ethical principles of the profession.

Charges of conduct contrary to the Pri ciples of Medical Ethics should be brought local medical societies when the facts "in cate that the honor and dignity of the prof sion are denigrated," said the council.

Special Feature

What Does the AMA Do for YOU?

By

David B. Weihaupt
Director, AMA Department of Planning
and Development

Following is a transcript of the address delivered by Mr. Weihaupt at the annual MSMA Public Affairs Conference held in Jefferson City on February 3-4.

I'D LIKE TO BEGIN by saying I am under no delusions of grandeur that the AMA is loved and understood by the physicians of this country.

I know these questions are asked many thousands of times per year . . . "What has the AMA ever done for me?" and "What am I getting for my dues?"

I am here to tell the truth and to offer the correct information about the American Medical Association and AMPAC and what they are doing. I hope you accept what I say as well as many people accept the fallacies printed about us in the local newspapers and national magazines and on TV. But, let me clarify. I am not a propaganda peddler or a brainwasher for the AMA. I will not excuse or apologize, but I will defend and debate. Someone must, because it's the new rage to abuse the AMA.

The purpose of the Association is to promote the science and the art of medicine for the betterment of public health:

A. There are approximately 351,000 physicians in this country, of which 210,000 are AMA members. This means $13 million in lost revenues because one in three won't support his own profession. However, AMA dues-paying membership is increasing.
B. Approximately 55% of our total budget is from physicians' dues. The remainder or 45% is our advertising and exhibit revenue.
C. The IRS unrelated income tax of 47% doesn't cover the new dues increase.
D. Approximately $10 million of the budget goes for salaries for the 922 employes.
E. Real estate taxes are approximately $275,000 and Social Security payments are approximately $350,000 and up.

The AMA is one of the world's largest publishers. About $12 million of our budget goes into paper, printing and mailing as follows:

A. The *AMA News* has a circulation of 20 million newspapers per year.
B. We have approximately 1,600 different pamphlets on child care, health education, health tips, sex education.
C. We just mailed four million free pamphlets on the pill.
D. The magazine, *Today's Health*, reaches six and one half million Americans per month.
E. 100,000 kits on drug abuse are sent to medical societies and individual physicians.
F. *JAMA,* the Journal of the American Medical Association, has an annual circulation of 12 million.

Why all this paper? These publications have been requested by the 242 members of the AMA House of Delegates, by the public of this country, the schools of this nation, allied health professions and health institutions and, also, the more than 2,000 state and county medical societies.

As a result of the requests, we research, plan, design, publish and print and mail these tens of millions of pieces every year. This is the responsibility of the AMA to the physicians and to the people of this country, and it is a responsibility we must keep. Or, would you have us yield to someone else? Shall we say the state government or the federal government or labor?

Please think about these points:

A. In one day at the AMA, 3,000 long distance calls are received. Membership services receive 137,000 per year.

B. 23,000 pieces of first class mail come into the AMA every day. Membership services receives 212,000 pieces per year. This is six million pieces of mail every year.

C. Each week, we receive 1,000 requests from the general public for help and information, and we get many thousands more requests for information from physicians, whether or not they are members.

D. We make 8,000 changes in physicians' home and office addresses in our card catalog every week.

E. In an average month, the Archive Library receives 3,000 research requests and 750 requests for books. Also, they photocopy and send out approximately 25,000 pages of material each month.

F. The AMA-ERF Student Loan Program has arranged for more than $51 million in loans to medical students, interns and residents. The average annual physician contribution in this country is $2.50. Since 1955, we have distributed more than $35 million to medical schools in this country, and the 80 councils and committees function continually for the public and profession. Nine hundred practicing physicians serve on these councils and committees.

The AMA Department of Investigation wages a relentless battle every day against the quacks and charlatans who abuse the public and smear the name of doctor.

I would now like to discuss that which the press dearly likes to write about, the Washington lobby. This is the big arena in which we are facing crisis after crisis every day.

The press writes about the lobby as a huge multimillion dollar organization that opposes everything. But, only 1% of the budget of the AMA goes toward lobbying. This so-called multimillion dollar lobbying staff, in truth, consists of four registered lobbyists. Yes, we have only four men in Washington compared to labor's 425 lobbyists.

Each of our four men has 25 senators and approximately 110 congressmen to know, work with and convince. A small force, indeed, but don't let me minimize their abilities, their influence, their effectiveness and their successes. They do an outstanding job.

The Washington office fills 600 requests per month from government agencies and congressmen and senators and our men have the finest professional relationship that has ever existed in the Halls of Congress.

Let me give you some information about what this lobbying staff is really up against. In the 92nd Congress, 20,000 bills were introduced (65 per legislator), 3,000 of them with medical implications.

We have one man in Washington to analyze these 3,000 bills. We favor 85% of the bills on which we testify.

Some of the fights that these men face in Washington are as follows:

There are attempts for unannounced federal inspection of your records, federal honor oaths, federally run peer review, federal compulsory generic prescribing, federal fee schedules, federal HMOs, and a $84 billion federal national health insurance program that will require relicensure of all M.D.s in the United States. This bill did not pass only because your AMA stood in its path.

Of course, some refer to our great legislative failure which was the passage of the Medicare law. However, we defeat 50 worse than that in every session of Congress.

So, we must have a strong lobby to add common sense to the 3,000 bills with medical implications in Congress.

We are the only plug in the dike to prevent a flood of polluted medical legislation from oozing over the profession. I believe that this is most of what we are doing for you now. Practically every function of your practice has something to do with laws and legislation.

AMPAC or politics are bad words to some physicians. It (AMPAC) is considered the illegitimate child of the medical society to some. But, it's really just helping at the polls those who share your political beliefs and setting a climate to advise government in writing good, workable medical legislation.

More than one third of a century ago in 1935, a group of intelligent, sophisticated and determined men sat down to solve a problem. That problem was "How to get Congress to do what they wanted them to."

The solution really was quite simple—manpower, membership plus money to put men in office who share their beliefs. These men were leaders of American organized labor, now the Ruther Committee of 100, ergo the Kennedy Bill.

Time and time again, congressmen told our four lobbyists that they didn't care about organized medicine and care only about the folks t home in the district who voted them into ofice. They often said, "Where were you when I ieeded you? All you AMA people do is ask for ielp. Did you ever think of giving any help?"

The congressmen sensibly choose political surival to political suicide.

That was a good hint. In 1961, one fourth of century after labor, AMPAC was formed and 0 state PACs were formed. Now, the folks back it home in the district became organized medcine's voice, our new voice which was founded en years ago after 90 years of laryngitis.

It was agony selling the political action-MPAC idea to doctors when we started. Many aid that political involvement would destroy heir image. Most have since found out that oninvolvement could destroy their practices.

Today, we have tens of thousands of members ind each year brings a record year, as did 1972.

AMPAC is the fastest growing political influence in the history of this country and the fourth largest, most influential political power in the U. S. Preceding it are the Democratic Party, first; Republican Party, second; and COPE, third.

What does AMPAC do in an election year? It selects a candidate to support on the basis of his voting record, philosophy and need. It provides survey research, survey teams and computer analysis—direction on issues. It provides AMPAC and state PAC campaign funds. It provides campaign management advice and organizes Candidate Support Committees from the medical community.

Win or lose, we end up with a Congress of so many friends and so many nonfriends. However, the climate of the Congress changes. Our nonfriends know that they have been in a fight and don't want another one like it. They now have a respect for a voice that is becoming familiar to them, the voice of medicine.

Political suicide to them now may become opposing the medical-political community at home.

We don't broadcast our success. It is poor politics, and winning candidates do that for us. Why tell how you won the game? We may play again. Our win record is more than 80%, the best in the business.

So, there it is. It is not immoral, illegal or unethical. It's not arm twisting, dirty politics or socially improper. It is competing for a friendly ear in government, i.e., not looking for one but *building* one.

Many doctors don't agree with those whom we support or with what we stand for, but we have no hard line. We just want to prevent government from inviting 1,000 people to a free banquet when there is only food for one.

Yet, it has been said thousands of times by thousands of physicians, "AMA doesn't reflect my opinions." He who says that is wrong. Yes, we do reflect his opinions hundreds of times each day. AMA makes thousands of policy decisions every year. With 3,000 bills in Congress and 250 resolutions in the AMA House of Delegates, AMPAC makes thousands of decisions every year. They can't all be in the range of the doctors' beliefs. Some refuse to support us because we are too liberal. Some do so because we are too conservative and others because we are too fast, too slow, too hard, too soft.

How can we possibly win your sympathy unless you understand the problems? With whom do you agree all of the time? Is it your partner, profession, church, medical association, government or wife?

What about the abortion issue? Some leave us because we have liberalized our position and some because it isn't liberal enough. Shall we have two associations for each issue?

The press is full of exaggerated articles about the doctor rebellion in the AMA. I ask myself who and what are doctors rebelling against? Why us? We are not the enemy. Too many doctors edge up for a place at the wailing wall and lament the shortcomings of their medical association, their government and the abuses by the news media. Their cries would move a heart of stone, but do they help? To criticize is easy, but to be constructive is the challenge.

Some M.D.s expect the AMA to be the Messiah for all ideas, all solutions, all philosophy, all pure, all correct and, at all times, agreeing with them and for only $110 per year . . . their own god for the profession. And, when a perfect score isn't made, they quit the church before the collection plate comes around.

So, when I am asked "What do I get for my dues?" . . . my short replay is, "Nothing." Who said the $110 in dues would come back to the doctor on January 1 each year as a short term capital gain? Tangibles bought in a retail store for $110? No, the AMA is not an investment nor a gift house. It's a hard-working, hard-fighting organization serving the profession well. And, when a doctor joins AMPAC, we don't promise a win. We promise a hard fight. We are employed as gladiators to fight in the arena, but if we lose one, often we get thumbs down.

The physicians joining the AMA, the state *medical association, your county medical society and AMPAC is providing a service not only to his profession, but to himself and, yes, even to his patients. What does quitting the AMA prove? Nothing . . . except to weaken it.*

If the preceding information does not convince you of what we did for you yesterday and today, of our planning for tomorrow and of the dedication of the AMA to the profession and the people of this country, I wish to ask the following favors of you:

A. Read with a critical eye the newspapers and magazines of this country that misshape our image and misinterpret our work.
B. Don't quote your enemies; quote your friends. The state and county societies and the AMA aren't the ones who are passing the bills to tell doctors how to practice medicine.
C. Also, don't criticize the AMA, AMPAC, county and state societies with inaccurate information.

Now, let me ask you the questions. "Are we doing what you want us to do? If not, tell us what you want." Perhaps the AMA cannot change the course of history, but when the final judgment is written, let it be written that we worked and fought, for we refused to lose your profession to the social planners by default.

A physician once said to me, "If things get worse at the AMA, you will probably lose your job." I said, "No sir, but you may lose yours."

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PRESCRIBING INFORMATION
Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.

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While Antiminth is highly effective against pinworms and roundworms, the illustration is not meant to imply 100% efficacy.
Data on file at Roerig.

Please see prescribing information on facing page.

medical melange

Notes of interest from Here . . . . and There

Dr. Durward G. Hall of Springfield and Washington, D. C., a former Missouri Seventh District Congressman, has been appointed to the board of regents of the Uniformed Services University of the Health Sciences. While in Congress, Dr. Hall was instrumental in passage of legislation which created the new Armed Forces institution which will graduate doctors for the U. S. military services, with possible elimination of the necessity to draft doctors away from civilian practices. Among others named to the board are **Malcolm Todd,** M.D., chairman of the AMA Council on Health Manpower, and **H. Ashton Thomas,** M.D., secretary of the Louisiana State Medical Society.

A team of American heart specialists headed by **Dr. E. Grey Dimond,** provost for health sciences at the University of Missouri-Kansas City, entered China on April 22 at the invitation of the People's Republic of China. The trip followed a tour of this country by Chinese physicians in October, 1972. Dr. Dimond, who made the arrangements for both trips, said the Chinese Medical Association invited him and seven other physicans to spend 14 days in China giving lectures and exchanging information. Sponsors of the visit are the American College of Cardiology and the Bureau of Educational and Cultural Affairs of the U. S. State Department.

Dr. Donald R. St. John is the new Clinical Director of the Marshall State School and Hospital. His appointment became effective on April 1. Dr. St. John has been a member of the State School medical staff and a resident of Marshall for the past seven years. He is a graduate of the St. Louis University School of Medicine.

Dr. Wilber B. Spalding, Plattsburg, has retired after practicing medicine for 43 years. He opened his practice in Plattsburg in 1928. Described as "a man who has served his profession and community faithfully and with dedication," Dr. Spalding has received special citations from the Pony Express Council of the Boy Scouts in St. Joseph and from the Rotary Club. Dr. and Mrs. Spalding are the parents of two sons who are ophthalmologists. They are **Dr. Wilber B. Spalding, Jr.** of Kansas City and **Dr. David Spalding** of Springfield.

Dr. Theodore H. Aschman, Kansas City, was one of five persons to be awarded an alumni citation from McPherson College in Kansas at the annual alumni dinner on May 1. Dr. Aschman, who has practiced obstetrics and gynecology since 1920, retired in October of last year.

For the third consecutive year, **Dr. John T. Logue** of Columbia has supplied an unusual gavel which sounds the opening and closing of the annual Journalism Week banquet at the University of Missouri. Obtained from Brazil, Dr. Logue's "Gavel '73" was donated by Project HOPE, courtesy of **Dr. William B. Walsh,** HOPE's founder and director. Dr. Logue became involved with HOPE in 1966 when he served for two months aboard the Project's hospital ship S. S. HOPE while it was docked at Corinto, Nicaragua. Created for the occasion, the Journalism Week gavels are retired to a special exhibit case in Neff Hall at the University.

Missouri senators and representatives were honored at he Legislative Day Luncheon in Jefferson City on April 11. *(Left to right)* Sen. Truman E. Wilson of St. Joseph; Mrs. Charles R. Willman, President of the MSMA Auxiliary; and Sen. William J. Cason of Clinton, president pro-tem of the Missouri Senate.

Senator Cason Addresses Woman's Auxiliary at Annual 'Legislative Day' Luncheon

"Know your senator and know your representative!"

This advice was offered by Sen. William J. Cason, president pro-tem of the Missouri Senate, when he addressed more than 120 Missouri physicians' wives who attended the MSMA Woman's Auxiliary's annual Legislative Day in Jefferson City on April 11.

The members of the Woman's Auxiliary had travelled to the Capital City from communities throughout the state to observe their second successful Legislative Day. After visiting the Missouri House of Representatives and Senate, members of the group toured the State Capitol Building, honored representatives and senators from their respective districts at a luncheon at the Hotel Governor and then toured the historic Governor's Mansion.

Mrs. Charles R. Willman of St. Joseph, President of the MSMA Auxiliary, said that the purpose of the day is to give the physicians' wives an opportunity to observe the state's seat of government and to see their representatives in action. It also is to accelerate the Auxiliary's interest in legislative affairs and their effect upon the medical profession and health care fields.

Members of the group were introduced to the House of Representatives by Rep. Mark A. Youngdahl of St. Joseph (9th District) and to the Senate by Sen. Truman E. Wilson of St. Joseph (34th District).

Mrs. Willman and Mrs. George J. Lytton, of Kansas City, President-Elect of the Auxiliary, were honored by personal introductions on the floor of the house. Miss Charlotte Willman and Miss Kerri O'Connor also received special recognition by being named Honorary Pages of the Day in the House of Representatives. Miss O'Connor is the daughter of Dr. and Mrs. William O'Connor, St. Joseph.

Mrs. Willman presided at the luncheon. She introduced Senator Wilson who spoke briefly. He then introduced Senator Cason.

Members of the Woman's Auxiliary to the Cole County Medical Society were hostesses for Legislative Day. Four of the Jefferson Citians are shown here visiting with their senator. *(Left to right)* Mrs. Jack S. Sanders; Mrs. James Gordon, MSMF Chairman for the MSMA Auxiliary; Sen. Ralph Uthlaut, Jr. (23rd District), New Florence; Mrs. H. K. Kanagawa, President-Elect in Cole County; and Mrs. David Scott.

Boone County Auxiliary members visited with the 19th District's Sen. Larry R. Marshall: *(Left to right, seated)* Mrs. George P. Wilson, Senator Marshall and Mrs. William Gaunt. *(Standing)* Mrs. James Denninghoff and Mrs. Tom McMurry. All are from Columbia.

Jackson County Auxiliary members were proud to introduce their Rep. Alex J. Fazzino (22nd District), who also is from Kansas City. *(Left)* Mrs. Pat A. Barelli and *(right)* Mrs. Glenn Elliott.

Sen. Paul L. Bradshaw (30th District) and friends from Springfield and Greene County Medical Auxiliary. *(Left)* Mrs. DeArmand Moore and *(right)* Mrs. Howard J. McAlhany. Dr. McAlhany is Councilor for the Eighth Councilor District of the Missouri State Medical Association.

Mrs. Wallace R. Stacey of Independence, a Past-President of the MSMA Woman's Auxiliary, was hostess to two legislators—*(left)* Sen. Lem T. Jones, Jr. (10th District) of Kansas City and *(right)* Sen. Jack E. Gant (16th District) of Independence.

Senator Cason complimented the Auxiliary members for their active interest in legislation and cited Mrs. Keith D. Jones of Warrensburg, Immediate Past-President of the Auxiliary, who initiated the annual Legislative Day during her term of office in 1972.

He encouraged the women to increase their knowledge and involvement in influencing the passage of good legislation pertaining to the health fields. He described the state's new "Hot Line" as an excellent source of information regarding the status of all bills introduced in the House and Senate.

Others who spoke briefly at the luncheon included Mrs. James A. Reid of Marshall, Auxiliary Public Affairs and MMPAC Chairman; Mrs. Gerald L. Miller of Kansas City, Legislative Chairman; and Raymond A. McIntyre of Jefferson City, executive secretary of the Missouri State Medical Association.

Mrs. Jerome Schmidt of Jefferson City, President of the Cole County Woman's Auxiliary and Mrs. Harold Robb, Legislative Chairman for Cole County, made arrangements for the luncheon and other events of the day.

WASHINGTON

Federal health expenditures in the current fiscal year will exceed $42 billion—an increase of $2 billion over the previous fiscal year.

The report on *Federal Medical-Health Appropriations,* prepared by the American Medical Association's department of governmental relations, offers a unique view of the federal government's overall involvement in health and health related activities.

In most cases, supplemental appropriations for specific programs are not included, meaning that actual figures are higher than presented. The bulk of the report deals with appropriations, but a table also shows estimated spending this fiscal year on trust fund and other expenditures for disability in various programs including Social Security, Veterans administration, military disability retirement and railroad retirement.

Considering appropriations alone, the total for the present fiscal year is $28.3 billion compared with $26.5 billion the previous year. Federal Medicare expenditures of $9.5 billion are included although $6.6 billion come from the Social Security Medicare trust fund for part A or hospital benefits. The Medicare law requires these funds to be treated as appropriations by Congress.

The Health, Education and Welfare Department, of course, leads the list in appropriations with $18.1 billion compared with $17.6 billion the year before. In order come the Veterans Administration, $2.9 billion; Defense, $2.8 billion; Environmental Protection, $2.3 billion; Federal Employes Health Insurance, $604 million; Agriculture, $362 million (animal and plant health inspection, etc.); State, $258 million; and OEO, $150 million.

In the nonappropriations area, Social Security payments to disabled workers were $4.2 billion, service-connected VA disability payments were $3 billion and nonservice connected, $1.5 billion.

* * *

A sweeping study has allayed the fear that this nation would become flooded with ex-GI drug addicts by finding that very few young soldiers who took narcotics in Vietnam have continued their addiction in civilian life.

The study also presented information indicating the physical grip of heroin addiction may not be as strong as heretofore believed—"one half of all those who reported heroin dependency in Vietnam had withdrawn on their own."

Commenting on the $400,000 study, Richard S. Wilbur, M.D., assistant secretary of defense for health and environment, declared:

"We now know that recovery from heroin dependency is not impossible; and that in the case of young, healthy, well-disciplined men in the armed services, rehabilitation will be successful in the majority of cases."

Dr. Wilbur compared the narcotic dependence rate of 1.3% among Vietnam returnees with the 1.2% rate of drug abusers identified in the civilian population of young draftees and recruits. He estimated the number of addicts of all Vietnam veterans at about 2,000 to 3,000 of the 313,000 enlisted men who served in Vietnam during the high use period in the last several years of the war. Little heroin was used prior to this by U. S. troops.

The study, prepared under the direction of Lee Robins, Ph.D., Professor of Sociology in Psychiatry at Washington University, was originated by the special White House action office on drug abuse and funded by the Defense Department, the Veterans Administration, the National Institute of Mental Health and the Labor Department. Some 900 enlisted men were interviewed.

Dr. Wilbur told a Pentagon news conference that there are many myths surrounding addiction. "I was taught that anyone who ever tried heroin was instantly, totally and perpetually hooked," he said.

"Treatment success rates were reported to be less than 5%. Therefore the use of methadone maintenance for all heroin addicts and even legalization of heroin seemed desirable to some advocates because it seemed impossible to get off heroin."

But the accumulating data being gathered by Defense in the wake of the Vietnam drug crises, including the latest report entitled "A followup of Vietnam drug users," has caused "us to reexamine the old beliefs more critically," said Dr. Wilbur.

The followup study said that only 7.2% of the men who had been detected as narcotic users in Vietnam had felt narcotic dependent at any time since their return. Dr. Wilbur pointed out that

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93% of the men who had been identified in the service as drug users had not returned to their drug dependence upon return from Vietnam. This closely parallels estimates of success in Defense rehabilitation programs.

Dr. Wilbur, in referring to inservice treatment programs, reported more than 70,000 men had been treated for drug abuse with more than 59,000 either restored to duty or released from active service following successful rehabilitation, more than 6,000 men remained in short term rehabilitation and 4,000 more had been referred to the Veterans Administration for lengthier treatment at the end of their service tour.

* * *

The National Institutes of Health have announced a ban on research involving live aborted fetuses. The restriction applies only to NIH-supported research, but it is expected to be observed in much of the other medical research in this country.

Dr. Robert Berliner, NIH deputy director for science, said: "We know of no circumstances at present or in the foreseeable future which would justify NIH support of research on live aborted human fetuses."

Dr. John F. Sherman, NIH acting director, said any scientist receiving NIH funds found to be doing experiments on live aborted human fetuses would be asked to stop even if NIH funds were not allotted to that particular research.

The ban did not apply to fetal tissue but only on live fetuses capable of being kept alive under laboratory conditions for several hours after abortion.

The NIH announcement was prompted by a protest march being planned by seniors at the Stone Ridge Country Day School of the Sacred Heart, a Roman Catholic school for girls adjacent to the NIH in Bethesda, Md.

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The cerebral or peripheral vascular disease patient often has coexisting disease[1] which calls for another drug along with his vasodilator. It may be a hypoglycemic, miotic, antihypertensive, diuretic, anticoagulant, corticosteroid, or coronary vasodilator.

Vasodilan is not incompatible with any of these drugs—no treatment conflict has been reported. And, unlike other vasodilators, Vasodilan has not been reported to affect carbohydrate metabolism, liver function, or intraocular pressure—or to complicate treatment of diabetes, hypertension, peptic ulcer, glaucoma, or liver disease.

In fact, there are no known contraindications to the use of Vasodilan in recommended oral doses, other than that it should not be given in the presence of frank arterial bleeding or immediately postpartum.

1. Gertler, M. M., et al.: Geriatrics *25*:134-148 (May) 1970.

Indications: Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.
3. Threatened abortion.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.

Dosage and Administration: 10 to 20 mg. three or four times daily.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Adverse Reactions: On rare occasions, oral administration of the drug has been associated in time with the occurrence of severe rash. When rash appears, the drug should be discontinued. Occasional overdosage effects such as transient palpitation or dizziness are usually controlled by reducing the dose.

Supplied: Tablets, 10 mg.—bottles of 100, 1000, 5000 and Unit Dose; 20 mg.—bottles of 100, 500 and Unit Dose.

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Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole. **Warnings:** If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established. **Precautions:** Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored. **Adverse Reactions:** Most frequently encountered are anore , nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddin s, and headache have occurred. Rarely, tinnitus, hyperirritabil , numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise i cephalin flocculation and SGOT; perianal rash, cholestasis a parenchymal liver damage; hyperglycemia; transient leukop ia. malodor of the urine, crystalluria, hematuria; appearance o ve Ascaris in the mouth and nose. Hypersensitivity reactions

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e: fever, facial flush, chills, conjunctival injection, dema, anaphylaxis, skin rashes, erythema multiforme ding Stevens-Johnson syndrome), and lymphadenopathy. **ied:** Chewable tablets, containing 500 mg thiabendazole, es of 36, strip packaged, individually foil wrapped; nsion, containing 500 mg thiabendazole per 5 ml, in s of 120 ml.

ore detailed information, consult your MSD representa- r see full prescribing information. Merck Sharp & e, Division of Merck & Co., INC., West Point, Pa. 19486

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addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

SYNTHROID
T4

T_4 IS THE PREDICTABLE HORMONE BECAUSE IT LOVES PROTEIN.

SYNTHROID® (sodium levothyroxine) is pure synthetic T_4, the major circulating thyroid hormone. It is reliable to use because of its affinity for protein-binding sites in the blood. T_3 is more fickle. Sometimes it binds. Sometimes it doesn't. T_4 more *predictably* binds to protein.

RADAR
AHEAD

ALL THYROID-FUNCTION TESTS ARE USEFUL IN MONITORING SYNTHROID THERAPY

No calculations are needed, test interpretation is simple.

Any of the commonly used T_4 thyroid function tests (P.B.I., T_4 By Column, Murphy-Pattee, Free Thyroxine) are useful in monitoring patients on T_4 because they *all* measure T_4. Patients on SYNTHROID are thereby easy to monitor because their results will fall within predictable, elevated test ranges. Of course, clinical assessment is the best criterion of the thyroid status of the drug-treated patient.

TEST	HYPOTHYROID	SYNTHROID THERAPEUTIC NORMAL
P.B.I.	Less than 4 mcg %	6-10 mcg %
T_4 By Column	Less than 3 mcg %	7-9 mcg %
T_3 (Resin)	Less than 25%	27-35%
T_3 (Red Cell)	Less than 11%	11.5-18%
Free Thyroxine	Less than 0.7 nanograms %	0.7-2.5 nanograms %
Murphy-Pattee	Less than 2.9 mcg %	4-11 mcg %

HISTORICAL
MARKER

TWO GOOD REASONS WHY THE ROAD TO NORMALIZED THYROID STATUS IS SO SMOOTH FOR THE SYNTHROID PATIENT.

(1) The onset of action of T_4 is gradual. It has a long in vivo "half-life" of over six days. (Occasional missed doses or accidental double-doses are of les concern because of this factor)[1]; (2) since SYNTHROID contains onl T_4, the potential for metabolic surges traceable to more potent iodides (T_3) is eliminated.

AS WITH ANY THYROID PREPARATION, CAUTIOUS OBSERVATION OF THE PATIENT DURING THE BEGINNING OF THERAPY WILL ALERT THE PHYSICIAN TO ANY UNTOWARD EFFECTS.

Side effects, when they do occur are related to excessive dosage. Caution should be exercised in administering the drug to patient with cardiovascular disease. Rea the accompanying prescribing information for additional data o write Flint Laboratories.

Choose the Smooth Road ...to thyroid replacement therapy

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ne (T_4) is, as you know,
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synthetic thyroid drugs,
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WHY DOES SYNTHROID COST LESS THAN SYNTHETIC DRUGS CONTAINING T_3?

Very simple. T_3 costs more to make synthetically than does T_4. So it is economically necessary for a synthetic thyroid medication containing T_3 to cost more than one containing T_4 alone. Synthetic combinations cost patients nearly 50% more than SYNTHROID[3] because the T_3 costs more to start with; also there is the additional expense of formulating a tablet containing two active ingredients.

1. Latiolais, C. J., and Berry, C. C.: Misuse of Prescription Medications by Outpatients, *Drug Intelligence & Clin. Pharm.* 3:270-7, 1969.
2. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T4) to Triiodothyronine (T3) in Athyreotic Human Subjects, *J. Clin. Invest.* 49:855-64, 1970.
3. American Druggist BLUEBOOK, March, 1971.

OFFER:
Free TAB-MINDER medication dispensers to start or convert all your hypothyroid patients to SYNTHROID. Free information to physicians on role of thyroid function tests in a new booklet titled: "Guideposts to Thyroid Therapy." Ask us.

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Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. Indications for SYNTHROID (sodium levothyroxine) **Tablets** include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (nontoxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) **for Injection** is indicated for intravenous use in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. The injection is also indicated for intramuscular use in cases where the oral route is suspect or contraindicated due to existing conditions or to absorption defects, and when a rapid onset of effect is not desired.

Precautions: As with other thyroid preparations, an overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction. **Side effects:** The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction of dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) for Injection may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

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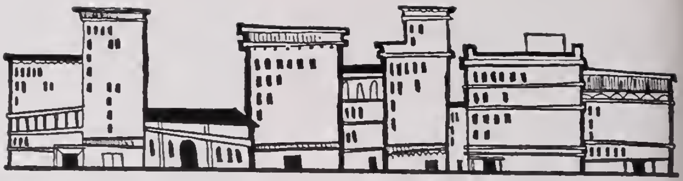
From the Medical Schools



WASHINGTON UNIVERSITY

Expansion has begun on the Irene Walter Johnson Institute of Rehabilitation in the Washington University Medical Center. Three new levels are being added to the two-story building at 509 South Euclid Ave. Cost for completing and equipping the new facility will be close to $2 million.

A major portion of the funds were contributed by St. Louis area families and corporations. A "roof lifting" ceremony and reception on April 21 honored these donors.

Additionally, $340,000 was received through a Federal grant made under terms of the Hill-Burton Act. The Detroit-based Kresge Foundation provided $100,000.

Coordinator for the planning and the expansion has been *Hugh Chaplin, Jr.*, M.D., Kountz Professor of Preventive Medicine. Dr. Chaplin was director of the Institute from 1964 until 1972.

Edward B. Mower, Jr. served as chairman of the committee to raise money for the project, and *James Lee Johnson* and *Chapin Newhard* were committee co-chairmen.

In addition to expanding the present occupational and physical therapy facilities, the new structure will provide space for several new or enlarged programs or both.

On the top level will be a 1/26th-mile track, four lanes wide, which will be used in coronary and respiratory disease rehabilitation. The fourth level will contain the biomedical engineering laboratories, coronary rehabilitation facilities, the hand rehabilitation center, an orthotics (special braces) service and development unit and the brace/amputee clinic and conference room.

Space for physical therapy on the third level will approximately double that being used presently. Particularly noticeable will be the enlargement of pediatric facilities and the provision of areas for rehabilitational nursing, treatment and counseling. The occupational therapy activities will be continued on the second floor, and this too will have more space. Changes of note on the lower level include specialized speech therapy rooms, a larger library with adjoining conference room, and expanded administrative offices.

Thirty-seven of the 97 members in Washington University School of Medicine's 1973 graduating class began practice in St. Louis hospitals after receiving the M.D. degree on May 25.

Fourteen will begin internships at Barnes Hospital, 11 at The Jewish Hospital of St. Louis, eight at St. Louis Children's Hospital, three at St. John's Mercy Hospital and one at St. Luke's Hospital. The other 60 are going to 48 hospitals in 22 states, the District of Columbia and Canada. All appointments were arranged by the National Intern and Resident Matching Program.

ST. LOUIS UNIVERSITY

The Institute for Molecular Virology at the St. Louis University School of Medicine has been awarded $1,060,000 from the National Cancer Institute of the National Institutes of Health for the construction of a new research building. The laboratories in this building will be of special design with very sophisticated equipment for the study of potential cancer producing viruses isolated from humans and other primates. Construction is scheduled for completion some time in June, 1973. The Institute, directed by *Dr. Maurice Green,* lifetime NIH career awardee, is located at the corner of Spring and Park Avenues.

HEW's National Cancer Institute has announced the membership of two ad hoc subcommittees to review research programs conducted under the National Cancer Program. Dr. Maurice Green is one of the 12 members of the Ad Hoc Advisory Subcommittee for the Frederick Cancer Research Center.

The subcommittee of which Dr. Green is a member is reviewing a research program conducted by Litton Bionetics, Inc., at the Frederick Cancer Research Center, Fort Detrick, Frederick, Md. Litton's program performance will be examined and recommendations made for further development of an advanced systems laboratory at Frederick. This will serve as a sophisticated resource for experiments by visiting U. S. and foreign scientists. The other subcommittee of 11 scientists is reviewing overall research of the NCI Special Virus Cancer Program and making recommendations for future virus-cancer research.

Subcommittee members were selected by the National Cancer Advisory Board, a group of 23 cancer experts appointed last year by President Nixon. The Board advises and assists the Director of the NCI in administering the National Cancer Program.

The children's clinic conducted annually by the *Phi Delta Epsilon Fraternity* of the School of Medicine and *Morro House Club*, a group of St. Louis University undergraduate students, was held at the St. Louis Veterans Hospital (John Cochran Veterans Administration Hospital) on April 7.

Senior and junior medical students conducted physical examinations on about 95 grade school children who reside in the North St. Louis area. They performed the physicals under the guidance and assistance of graduate physicians.

Physicians cooperating in the student project included *Dr. Raymond G. Slavin*, associate professor of internal medicine; *Dr. Simon Horenstein,* chairman, Department of Neurology; *Dr. Murray Chinsky*, a private practitioner; and *Dr. Herman Shyken*, instructor in radiology.

Dr. V. L. Willman, professor and chairman of the Department of Surgery at the School of Medicine, is secretary of the AΩA Beta Chapter of Missouri.

Dr. Robert H. Felix, dean, School of Medicine, addressed the St. Louis Public Relations Hospital Association on Health Care on April 5. The luncheon meeting hosted by the St. Louis University Medical Center Public Relations Department was held in the President's Dining Room of Busch Memorial Center.

UNIVERSITY OF MISSOURI-COLUMBIA

Dr. Owen J. Koeppe, chairman of the Faculty Council and the Department of Biochemistry, has been named provost for academic affairs at the University of Missouri effective August 1.

Dr. Koeppe will replace *Dr. Clifton Cornwell,* who has held the post on a temporary basis since it was created last fall and who has indicated he does not want to serve as permanent provost.

Dr. Koeppe has been on the University faculty since 1955, a member of the Faculty Council since 1962 and chairman since 1970.

Three professors and two house staff members at the University Medical Center were cited by medical students on April 25 for excellence in teaching. The "Golden Apple" awards were presented at the school's Spring Honors Convocation.

First year medical students chose *J. Harry Cutts,* Ph.D., associate professor of anatomy, to receive the coveted award. Second year students elected *Marcus Beck,* M.D., associate professor of pathology. *Dr. Elizabeth James,* assistant professor of pediatrics and head of the newborn nursery at the Medical Center, received the votes of the third and fourth year students now in clinical training. It was the first time a woman has been selected as the outstanding teacher.

Dr. Ronald Vander Molen, a fourth year resident physician in surgery, was cited for the second year in a row for excellence in teaching and *Dr. William Trumbower,* a first year resident in obstetrics and gynecology, also received an award for excellence.

Guest speaker for the Honors Convocation was *Dr. William A. Sodeman Sr.*, now president of the American College of Physicians, who was chairman of the Department of Medicine at Missouri University from 1953 to 1957. The lectureship honors Dr. M. D. Overholser, former chairman of the Anatomy Department in the School of Medicine.

Appointments of several replacement and new clinical faculty members for the School of Medicine have been announced by *Dr. William D. Mayer,* dean and director of the Medical Center.

Expanding patient loans in the new Columbia Veterans Administration Hospital have caused an increasing need for physicians in several areas of clinical medicine, Dr. Mayer said. All VA physicians hold faculty appointments in the Medical Center. Teaching programs for residents, interns, and medical students in the VA Hospital are under the direction of the School of Medicine.

Dr. Charles R. Peterson will arrive on June 1 to become professor and chairman of the Department of Physical Medicine and Rehabilitation at the Medical Center. Currently at Baylor University College of Medicine in Houston, Dr. Peterson will begin recruitment for additional faculty members in his specialty.

The departure in July, 1972, of a number of the faculty in PM&R coincided with the move of *Dr. Lester E. Wolcott,* department chairman, to the new medical school at Texas Tech in Lubbock. Several of the rehab staff accompanied him.

Since last fall, McHaney Hall, the University Medical Center's rehabilitation facility, has been undergoing a renovation and expansion program for additional facilities for the severely handicapped patients, stroke victims, amputees, paraplegics and quadraplegics. The enlarged facility is expected to be completed in 1974.

The creation of a new division of pulmonary diseases within the VA Hospital and the Department of Medicine at the Medical Center will bring *Dr. Kaye Kilburn* to Missouri from Duke University to be chief of this medical specialty. Also coming from Duke University is *Dr. Daniel J. Hurst,* who will be on Dr. Kilburn's staff.

Dr. James H. Butt, II, whose specialty is in gastroenterology, will also join the Department of Medicine faculty June 1. Dr. Butt currently is on the faculty at Western Reserve in Cleveland. An ophthalmologist, *Dr. Waseem Kamal,* who trained at King Edward Medical College in Pakistan and at the University of Florida Medical Center, joined the faculty here in March.

Another new appointee is *Dr. Anthony Ferro,* a psychiatrist who came to Columbia from private practice in St. Louis. He was graduated from Havana University Medical School in 1949.

Continuing Education Coming Events

June 1	**11th Annual Pediatric Seminar—Pediatric Ophthalmology** Baptist Memorial Hospital, Kansas City
June 1-2	**Annual Professional Meeting** Missouri Chapter of the American College of Surgeons Crown Center Hotel, Kansas City

Missourians Attend AMA Leadership Conference

Missouri was well represented at the recent AMA Leadership Conference at the Marriott Hotel in Chicago. *(Left to right)* Dr. Vencel W. Hollo of St. Louis, consultant for St. Louis Blue Cross, visits with five of the representatives of the Missouri State Medical Association who attended the meeting—Dr. Donald Judd, St. Louis, Treasurer; Dr. Louis P. Hetlage, Troy, Fourth District Councilor; Mr. Raymond McIntyre, Executive Secretary; Dr. E. A. Stricker, St. James, President; and Dr. R. Allen Chandler, Kansas City, Chairman of the MSMA Council. *(Photo courtesy of Hallister S. Smith.)*

in Brief

A summary of AMA, medical & health news

American Medical Association/535 North Dearborn Street/Chicago, Illinois 60610/Phone (312) 527-1500/TWX 910-221-0300

A formal planning system will be established by the AMA beginning in 1974. The system was designed by the Batelle Research and Development Laboratories, Columbus, O., and was recommended to the Board of Trustees by the Council on Long Range Planning and Development. The overall plan will be prepared by the Board and submitted to the House of Delegates for approval or modification at the 1973 Clinical Convention. The system, which will relate all AMA activities to specified goals, will enable the AMA to sense change, sharpen objectives, create mechanisms for measuring progress, improve communications and improve the allocation of resources.

Two new insurance programs are planned for AMA members. Negotiations are proceeding on a group hospital indemnity plan and an accidental death and dismemberment plan. The AMA's entire insurance program, which includes group term life and excess major medical policies, is available to qualified medical students and interns and residents. Coverage for students ends at graduation unless the student becomes an AMA member. Coverage for interns and residents is contingent upon AMA membership. Physicians can receive quick information on the group life and excess major medical programs by calling the program administrator, Marsh & McLennan, Inc., on a Wats free line (800) 621-0366.

Practice management workshops will be offered by the AMA across the country this year and in 1974. The AMA will make its workshop program available to state medical societies and will assist the state societies in conducting the training sessions for young physicians planning to go into private practice. Ten workshops will be available in 1973 and 20 next year. The AMA recently completed an experimental series of six such workshops at AMA Headquarters. Workshops will be limited to 25 participants and registration fees of $35 for AMA members and $60 for non-members will be charged. Direct inquiries to Dept. of Practice Management, AMA Headquarters.

AMA officers and trustees will visit 22 state medical association annual meetings between May and October. Since the visitation program began one year ago, officers and Board of Trustees members have received invitations from every state association. The goal of the project is to gain insight into the problems of physicians through face-to-face visits, obtain recommendations on how to solve the problems and describe AMA activities. Since mid-February, AMA officials have visited 18 state association meetings.

A committee to study future housing needs of the AMA and to consider the appropriate location of AMA facilities was created by the Board of Trustees. Named to the committee were Trustees John M. Chenault, M.D., chairman, and Max H. Parrott, M.D.; Delegates James M. Blake, M.D., New York, and John G. Morrison, M.D., California; and Vice-Speaker of the House Tom E. Nesbitt, M.D. Dr. Chenault said the Board continues to hear comment about the merits of Chicago and Washington, D. C., as the site for AMA Headquarters.

A new award, the Brookdale Award in Medicine, will be presented by the AMA June 24 at the Annual Convention. The $5,000 cash award is made possible through the personal generosity of Arnold Schwartz, president of the Brookdale Foundation in New York City, and his wife, Marie. It will be given to a physician who is under 50 years of age and has made outstanding contributions to medical research, teaching or clinical practice.

Expenditures for health care totaled $83,417,000,000 in 1972, according to statistics published in 73 *Socioeconomic Issues of Health,* the "blue book" of the AMA's Center for Health Services Research and Development. Of the total spending, $77,291,000,000 went for hospital care and $32,460,000,000 went for physicians' services. Per capita expenditures in 1972 were $153.38 for hospital care and $76.31 for physicians' services. Copies of the book will be available for purchase at the Annual Convention in New York.

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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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ROBERT J. STANLEY, M.D. *and*
BERNARD JAFFE, M.D., *St. Louis*

Aneurysm of Superior Mesenteric Artery

Case Report of Successful Repair

On the basis of autopsy studies,[1,2] as well as recent reviews of the literature,[3–5] clinically significant aneurysms of the superior mesenteric artery (SMA) are rare. They constitute approximately 15% to 20% of all the splanchnic artery aneurysms. At least 91 cases of superior mesenteric artery aneurysm have been reported, yet only 13 patients, including the one reported here, have been successfully treated.[3,5–7] Considering the etiology, 55% of the reported cases have been mycotic in origin, while those caused by arteriosclerosis, trauma and medial degenerative processes have occurred less frequently. Syphilitic aneurysms, which accounted for some of the earlier cases, have not been reported in the recent literature.

There is ample evidence that early and accurate diagnosis of this condition, as well as other splanchnic artery aneurysms, is mandatory if the patient is to be successfully treated. We report this case because of the unusual size of the aneurysm and because its true nature was not appreciated at the time of initial exploratory laparotomy. We particularly wish to emphasize the usefulness of selective arteriography both in the preoperative evaluation and the postoperative follow up and to demonstrate the value of aneurysmorrhaphy in the successful management of this serious problem.

Case Report

On March 25, 1972, a 57-year-old white man was transferred to Barnes Hospital. He was referred for treatment of an adbominal aortic aneurysm revealed at exploratory laparotomy two days earlier. The patient had enjoyed good health all of his life until approximately five days prior to his initial hospitalization when he began to have constant, dull, low anterior chest pain, which was noted particularly when he was in the sitting position and which was accompanied by mild shortness of breath and diaphoresis. The admission diagnosis of myocardial infarction was not substantiated; electrocardiogram, white blood cell count and enzymes were all normal. While he was in the hospital, an abdominal component to the pain developed and a small, discrete mass, which was not present at the time of admission to the hospital, was noted in the right upper abdomen. Exploratory laparotomy was performed to evaluate the abdominal mass, which was found to be an upper abdominal aortic aneurysm. Because

In reporting this case of an aneurysm of unusual size of the superior mesenteric artery, the authors emphasize the usefulness of selective arteriography in defining the site of origin preoperatively as well as in assessing the adequacy of surgical repair postoperatively. They also discuss relative incidence, etiology and surgical approach. Dr. Stanley is from the Mallinckrodt Institute of Radiology and Dr. Jaffe is from the Department of Surgery, Washington University School of Medicine.

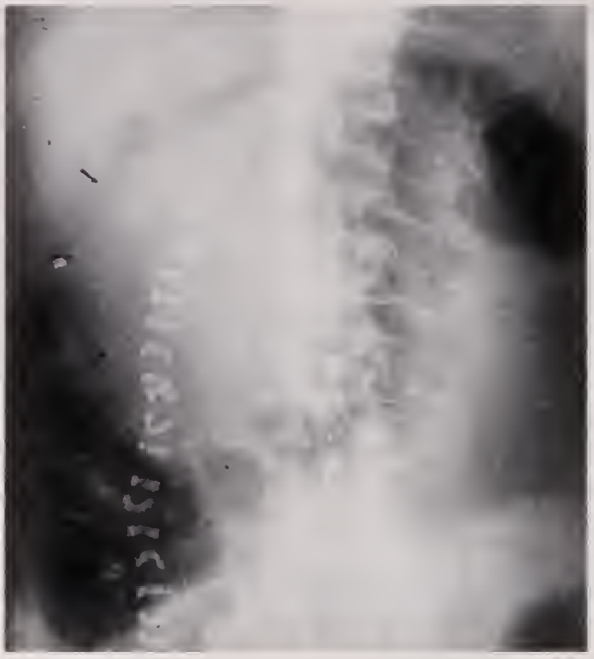

Fig. 1 AP supine film of abdomen demonstrates a large, rounded mass in the right upper quadrant displacing the antrum, duodenum and colon. Curvilinear circumferential calcification is noted *(arrow)* along the lateral margin of the mass. Skin clips are present from the initial exploratory laparotomy.

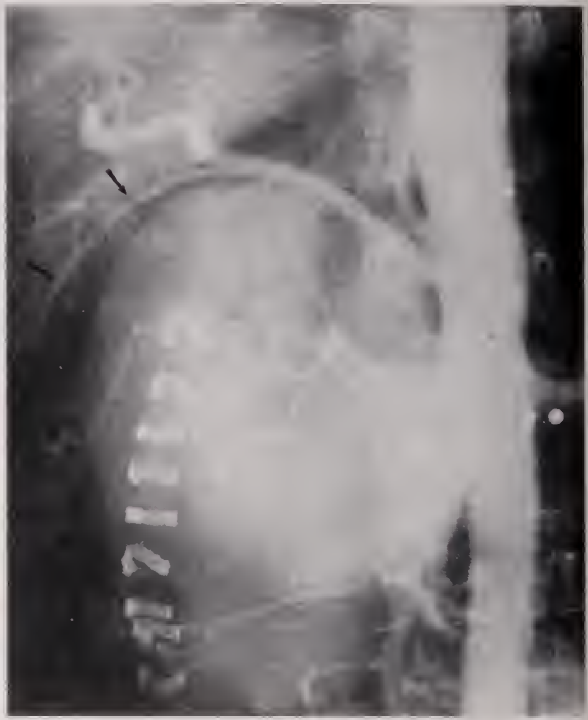

Fig. 2 Midstream aortogram demonstrates opacification of the right upper quadrant mass with the contrast, confirming that it is an arterial aneurysm. Note the marked stretching and lateral displacement of the common hepatic and gastroduodenal arteries *(arrows)*. The superior mesenteric artery appears slightly displaced, but is otherwise intact. The feeding vessel is not readily apparent from this study.

of its location, no attempt was made to repair the aneurysm. During the two postoperative days, the mass increased progressively in size and the patient was transferred to Barnes Hospital.

On admission to Barnes, the patient complained of persistent abdominal pain and upper back pain with radiation to the left subscapsular region. Physical examination revealed a 7 cm x 7 cm pulsatile upper abdominal mass with a loud bruit. Femoral and pedal pulses were normal. An electrocardiogram on the day of admission was normal. The hemoglobin level was 9 gm/100 ml, the hematocrit reading was 30% and the white blood cell count was 10,200/cu mm. The serum electrolytes and blood urea nitrogen were within normal limits, but the bilirubin, alkaline phosphatase and serum glutamic oxaloacetic transaminase were minimally elevated. A supine and cross table lateral view of the abdomen revealed a rounded mass in the right upper quadrant displacing the bowel anteriorly. A thin rim of calcification could be seen in the AP film (Fig. 1), but it was not visible in the lateral view.

During the next two days, the mass rapidly increased in size, necessitating emergency diagnostic studies and treatment. A midstream aortogram (Fig. 2) demonstrated a large saccular aneurysm to the right of the abdominal aorta producing marked stretching of the common hepatic and gastric duodenal arteries as well as slight postero-lateral displacement of the superior mesenteric artery. With the exception of the stretching and displacement, both the celiac and superior mesenteric arteries appeared otherwise intact. Initial attempts to selectively catheterize the celiac and superior mesenteric arteries were unsuccessful. However a selective catheter was finally positioned directly into the origin of the saccular aneurysm in the general area of the SMA (Fig. 3). A careful hand injection clearly demonstrated that the origin of the aneurysm was from either a small branch artery off the right lateral wall of the aorta or the proximal SMA itself.

The patient was immediately transferred to the operating room where an exploratory laparotomy was performed by employing a wide transverse subcostal incision. A large pulsatile mass approximately 11 cm in diameter was found posterior to the pancreas and stretching the pancreas over its surface. A left-sided approach was employed following splenectomy and mobilization of the left colon and the tail and body of the pancreas. No direct communication of the aneurysm with the abdominal aorta could be found. Nontraumatic clamp occlusion of the SMA produced a loss of pulsation in the aneurysm as well as in the peripheral branches of the SMA. It was presumed, therefore, that the aneurysm arose either directly from the lateral wall of the proximal SMA or from a small proximal branch, possibly the

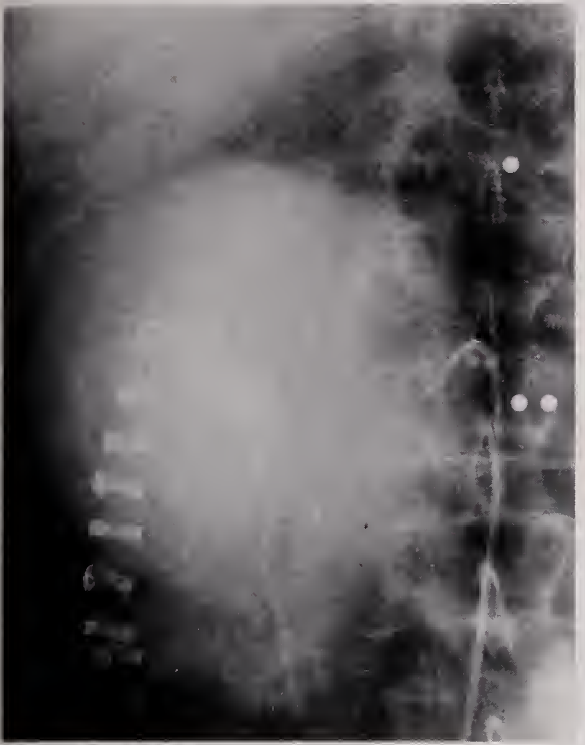

Fig. 3 A selective catheter with its tip in the general area of the origin of the superior mesentric artery (SMA) directs the contrast into the lumen of the saccular aneurysm without opacifying any portion of the feeding branch. Localization of the origin of the aneurysm was felt to be sufficiently well-defined to obviate the need for further injections.

inferior pancreaticoduodenal.

Following occlusion of the origin of the SMA, the aneurysm was directly incised and a 3 mm opening into the base of the aneurysm was identified. This aperture was suture ligated from within and the bulk of the aneurysmal wall was excised. After completion of the aneurysmorrhaphy and release of the occlusive clamp, adequate blood flow to the small bowel and proximal colon was demonstrated. Prior to the resection the aneurysm had stretched and compressed the portal vein over its wall so tightly that there was no evidence of flow through the portal system. Following repair, portal venous flow was restored. Bacterial and fungal cultures of the wall of the aneurysm were negative, and the gross and histologic appearance was typical of an arteriosclerotic aneurysm.

The patient tolerated the operative procedure remarkably well. With the exception of a transient and unexplained rise in serum bilirubin and alkaline phosphatase, his postoperative course was uneventful. The patient was discharged on the 13th postoperative day, at which time his serum alkaline phosphatase was still elevated but the serum bilirubin was approaching a normal level.

One month following discharge, the patient returned for follow up studies. A repeat aortogram (Fig. 4) and selective superior mesenteric arteriogram (Fig. 5) demonstrated that the common hepatic and gastroduodenal arteries had returned to a normal position. There were minimal irregularities

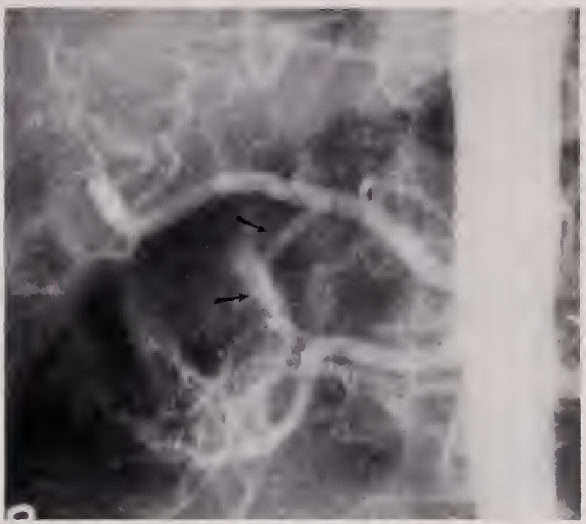

Fig. 4 Right upper quadrant detail from the postoperative midstream aortogram demonstrates a return of the common hepatic and gastroduodenal arteries *(arrows)* to a more normal anatomic position. No evidence of persistent aneurysm is seen.

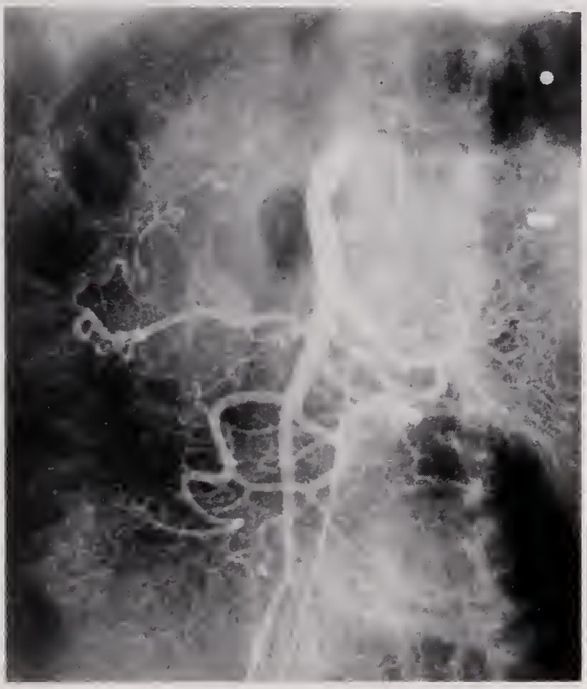

Fig. 5 Selective injection of the SMA demonstrates slight irregularity of the proximal lumen and an absence of branches on the right side proximal to the origin of the common right colic and middle colic artery. Again, no evidence of opacification of an aneurysm is seen.

in the right lateral wall of the proximal SMA without evidence of stenosis or recurrence of the aneurysm. The patient was free of symptoms and all blood chemistry values were now within normal limits.

Discussion

The diagnosis of a splanchnic artery aneurysm is difficult without the benefit of plain film radiography and selective arteriography. While curvilinear calcification in a mass is suggestive of an arterial aneurysm, it can not be considered diagnostic. The incomplete ring of circumferential calcification in the lateral view of the abdomen, which Weidner *et al*[8] consider to be presumptive evidence of an aneurysm of the SMA or celiac axis, was not visible in this case. The midstream abdominal aortogram demonstrated the general location and nature of this aneurysmal mass, but failed to define the feeding vessel. The somewhat fortuitous placement of the selective catheter directly into the lumen of the saccular aneurysm pinpointed the site of origin sufficiently to allow the direct surgical approach which was employed. The aortogram also excluded the possibility of multiplicity, a common feature of the splanchnic artery aneurysms.[9]

In contrast to some of the cases reported, this patient's symptoms were of relatively short duration and suggested primary chest or cardiac disease. While this patient's aneurysm was undoubtedly present for a long time, it remained essentially asymptomatic until the time of rapid increase in size and impending rupture. In addition, this patient had little, if any, clinical or radiographic evidence of significant atherosclerotic disease elsewhere. It is clear that the aneurysm was not mycotic in origin. Routine and fungal cultures were negative. Histologically, atherosclerosis was present in the wall of the aneurysm. None-the-less, a medial degenerative process could have the same final histologic appearance. So, it is impossible to determine which was the primary disease process. In many of the cases reported, atherosclerosis is presumed to be the etiology primarily because it is present in the specimen at the time of surgery or autopsy. As discussed by Stanley *et al*[5] a medial degenerative process may possibly be more common as the primary etiology of visceral artery aneurysms than the current literature would suggest.

Summary

An aneurysm of the superior mesenteric artery of unusual size is reported. Emphasis is placed on the usefulness of selective arteriography in defining the site of origin preoperatively as well as assessing the adequacy of surgical repair postoperatively. Relative incidence, etiology and surgical approach are discussed.

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Reprints: *Robert J. Stanley, M.D.*
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A Seminar on Therapeutics with major emphasis on *how* drugs should be used is scheduled at the Crown Center Hotel in Kansas City on June 14-15. Sponsors of the program are the University of Missouri-Kansas City School of Medicine and the Division for Continuing Education, the Kansas City Southwest Clinical Society, the Missouri Regional Medical Program and The Academy of Health Professions.

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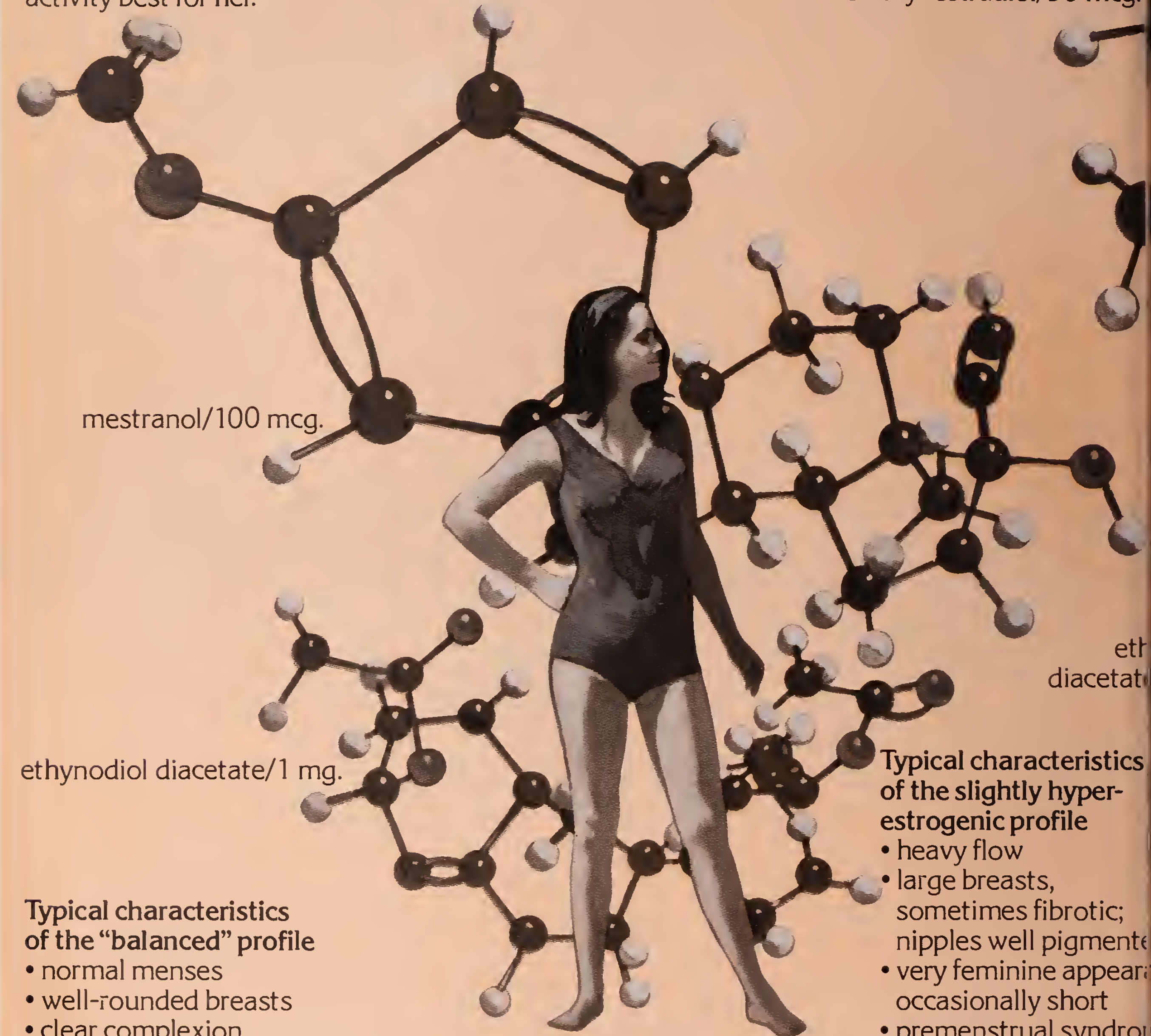
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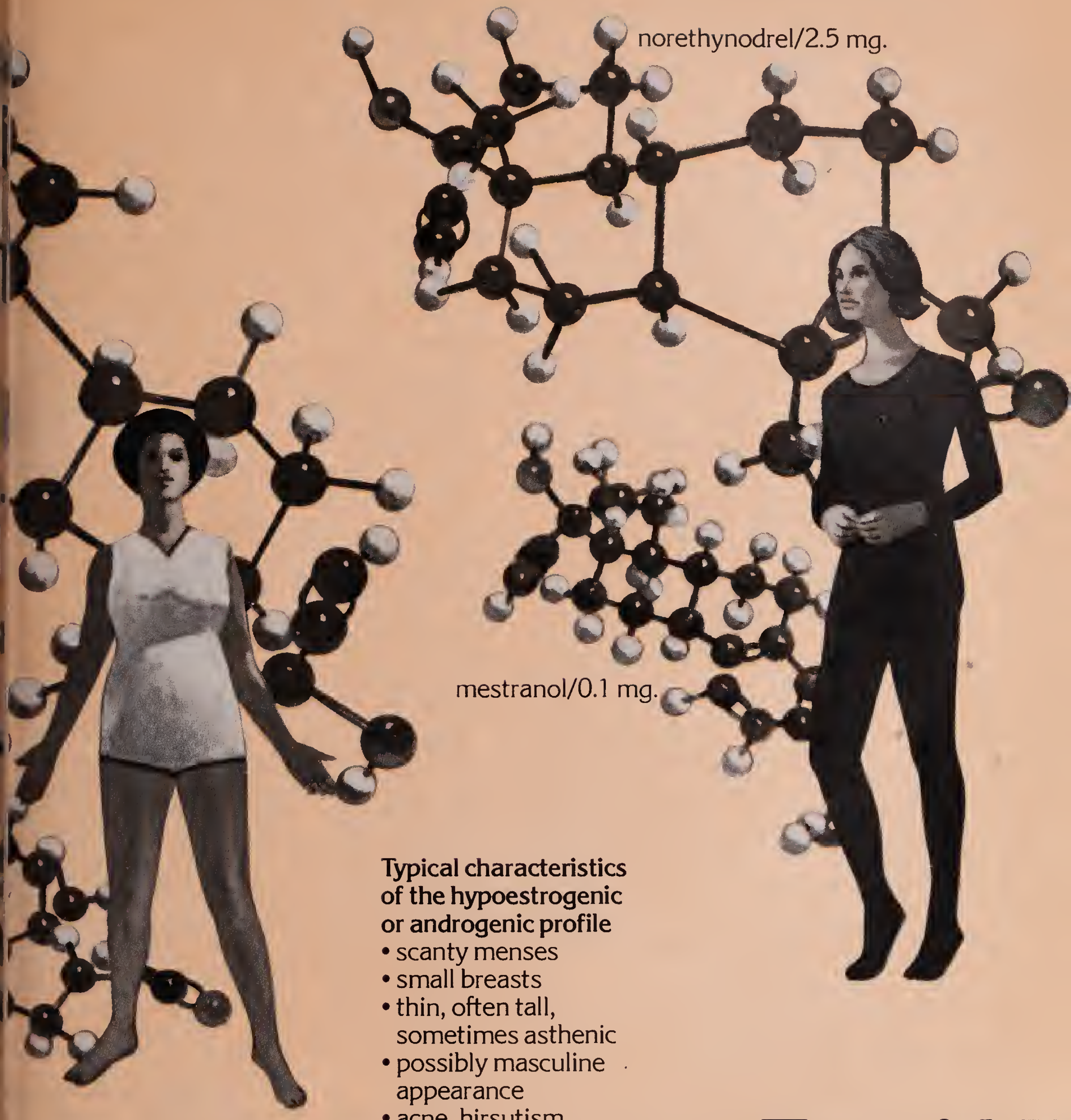
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Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations pre-existing uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ova
adrenal, hepatic or uterine function awaits further study. A decrea
glucose tolerance has been observed in a significant percentag
patients on oral contraceptives. The mechanism of this decrea
obscure. For this reason, diabetic patients should be carefully obse
while receiving Ovulen or Demulen therapy. The age of the patient
stitutes no absolute limiting factor, although treatment with Ovule
Demulen may mask the onset of the climacteric. The pathologist sh
be advised of Ovulen or Demulen therapy when relevant specin
are submitted. Susceptible women may experience an increas
blood pressure following administration of contraceptive steroids.

**Adverse reactions observed in patients receiving oral
traceptives**—A statistically significant association has been der
strated between use of oral contraceptives and the following ser
adverse reactions: thrombophlebitis, pulmonary embolism and
bral thrombosis.

Although available evidence is suggestive of an association, su
relationship has been neither confirmed nor refuted for the follo
serious adverse reactions: neuro-ocular lesions, e.g., retinal thr
bosis and optic neuritis.

The following adverse reactions are known to occur in pat
receiving oral contraceptives: nausea, vomiting, gastrointestinal sy
toms (such as abdominal cramps and bloating), breakthrough blee
spotting, change in menstrual flow, amenorrhea during and after t
ment, edema, chloasma or melasma, breast changes (tender
enlargement and secretion), change in weight (increase or decre
changes in cervical erosion and cervical secretions, suppressio
lactation when given immediately post partum, cholestatic jaun
migraine, rash (allergic), rise in blood pressure in susceptible individ
and mental depression.

Although the following adverse reactions have been reporte
users of oral contraceptives, an association has been neither
firmed nor refuted: anovulation post treatment, premenstrual
syndrome, changes in libido, changes in appetite, cystitis-like syndr
headache, nervousness, dizziness, fatigue, backache, hirsutism, lo
scalp hair, erythema multiforme, erythema nodosum, hemorrh
eruption and itching.

The following laboratory results may be altered by the use of
contraceptives: hepatic function: increased sulfobromophthalein re
tion and other tests; coagulation tests: increase in prothrombin, Fac
VII, VIII, IX and X; thyroid function: increase in PBI and butanol ext
able protein bound iodine, and decrease in T^3 uptake values; metyrap
test and pregnanediol determination.

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D. M. KLACHKO, M.D.** ***and*** **T. W. BURNS, M.D.,** ***Columbia***

Successful Treatment of Insulin Resistance With Dealaninated Pork Insulin (DPI)

Case Report

In this case report of a 50-year-old woman with maturity onset diabetes mellitus who developed insulin resistance, unusual features include the patient's rapid response to dealaninated pork insulin (DPI) after failure to respond to pure pork insulin. The authors conclude that DPI is an agent useful in the treatment of insulin resistance. The authors are from the University of Missouri Medical Center. This study was supported by National Institutes of Health Grants 5 RO1 AM5316-09 and 5 RO1 AM 11265-03.

INSULIN RESISTANT is a term used in describing the nonacidotic diabetic patient requiring 200 units or more of insulin for at least several days.[1] The precise mechanism underlying this excessive insulin requirement is not known, but, presumably, binding of the exogenous insulin of animal origin by tissue or circulating antibodies is involved. A number of agents and methods have been used in the treatment of insulin resistance. These include oral hypoglycemic agents,[2] dimercaprol (BAL),[3] nitrogen mustard,[4] human insulin,[5] discontinuance of insulin and alternate day insulin administration. Sulfated insulin[6] and fish insulin[7] also have been used, but these are not commercially available in this country. In this case report, the patient had a dramatic response to dealaninated pork insulin (DPI) after being resistant to both commercially available beef-pork insulin and to pure porcine insulin.

CASE REPORT

History

A 50-year-old Negro woman was first admitted to the University of Missouri Medical Center in 1962 at which time the diagnosis of diabetes mellitus was made on the basis of fasting blood glucose levels persistently above 150 mg/100 ml, glycosuria and acetonuria. Initially, the patient had been given up to 25 units of NPH insulin, but, by the time of her discharge, the diabetic state had been well-controlled without insulin, with fasting blood glucose values of approximately 100 mg/100 ml. She was discharged with a 1,500 calorie diet composed of 140 gm of carbohydrate, 60 gm of fat and 97 gm of protein, and she was instructed to take 2 gm of tolbutamide per day. During the next six years, her weight remained stable at about 155 lb, she had no episodes of acidosis or hypoglycemic shock and her urine was usually negative for glucose. In May, 1968, treatment with 500 mg of chlorothiazide daily was started for the control of essential hypertension.

In January, 1969, the patient noted the onset of weakness, weight loss, anorexia, polyuria and polydipsia associated with 3 to 4+ glycosuria. She was hospitalized by her local physician who found no underlying cause for the change in her diabetic status. She was discharged on a regimen of 50 units of Lente insulin and 20 units of regular insulin in the morning and 20 units of Lente in the evening. She became aglycosuric and both her appetite and strength improved. However, she continued to lose weight and by April, 1969, she weighed 115 lb. She again experienced anorexia and weakness and noted that 3 to 4+ glycosuria had recurred. On April 25, 1969, she was readmitted to her local hospital where she was found to be confused and dehydrated and to have a blood glucose value of 500 mg/100 ml. One week later, in spite of receiving approximately 90 units of insulin (Regular and Lente) daily, the patient lapsed into deep coma with grand mal seizures. A blood glucose concentration of 1,015 mg/100 ml, serum bicarbonate of 5 mEq/l, blood pH of 7.02 and large amounts of acetone in the urine were reported. With intensive treatment including large amounts of regular insulin and approximately 3,000 cc of 5% dextrose in lactated Ringer's solution per day, the patient gradually improved. However, even after the acidosis had been corrected and the patient was again conscious and alert, she continued to require in excess of 200 units of Regular insulin daily (range of 180 to 270 units insulin) to maintain her blood glucose in the range of 300 to 350 mg 100 ml. Because of the persistent, unexplained insulin resistance, she was transferred to the University of Missouri Medical Center on May 14, 1969.

Physical Examination

At the time of admission, the patient was alert and afebrile; blood pressure was 140/70, pulse rate was 76 per minute and weight was 114 lb. Funduscopic examination revealed bilateral retinal microaneurysms and small dot hemorrhages in the left fundus. There were bilateral immature cataracts. Auscultation over the neck revealed bilateral carotid bruits. The apex impulse of the heart was shifted slightly to the left of the midclavicular line and auscultation revealed a Grade III/VI systolic ejection type murmur audible over the aortic area with radiation into the neck. There was no costovertebral angle tenderness. The remainder of the examination was within normal limits.

Laboratory Data

The hemoglobin level was 10.5 gm/100 ml; the hematocrit reading, 35%; white blood cell count, 6,100/cu mm with 66% neutrophils, 32% lymphocytes, 1% monocytes and 1% eosinophils; and reticulocyte count, 2.1%. A sickle cell preparation was negative. Urinalysis revealed a specific gravity of 1.020 with 2% glucose without albumin or acetone; microscopic: occasional red and white blood cells.

The initial blood glucose level was 318 mg/100 ml; electrolytes: sodium, 135 mEq/liter; potassium, 4.1 mEq/liter; chloride, 97 mEq/liter; bicarbonate, 25 mEq/liter; blood urea nitrogen (BUN) 12 mg/100 ml; serum creatinine, 1.1 mg/100 ml. Serum proteins were 1.9 gm/100 ml albumin and 3.8 gm/100 ml globulin. Total lipids were 763 mg/100 ml (normal, 450-1,000 mg/100 ml); triglycerides, 127 mg/100 ml (normal, 30-135 mg/100 ml, fasting); phospholipids, 250 mg/100 ml (normal, 125-300 mg/100 ml); and total cholesterol, 266 mg/100 ml. Electrocardiogram revealed left ventricular hypertrophy and left axis deviation. Chest film showed tortuosity of the thoracic aorta and a normal heart size.

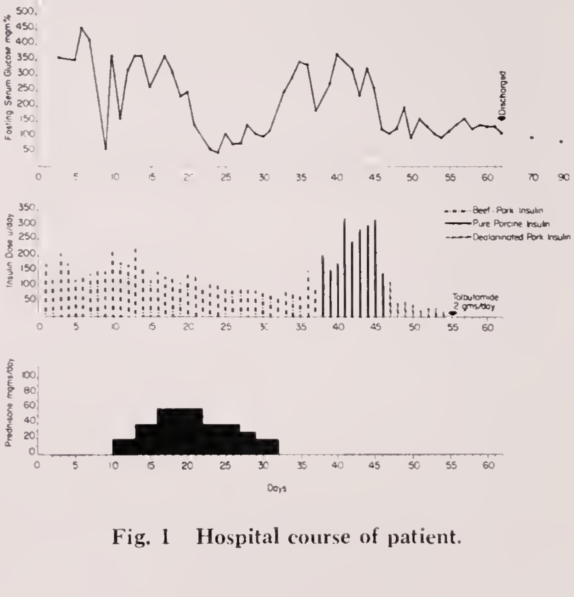

Fig. 1 Hospital course of patient.

Hospital Course

While searching for a cause to explain the apparent insulin resistance, diabetic control was attempted with two injections daily of mixtures of regular and NPH insulin. The dosage of insulin used and blood glucose values obtained are summarized in Fig. 1. It soon became apparent that the blood glucose of this patient could not be controlled with this regimen and she was treated with regular insulin only, four times per day. The dose was determined by the degree of glycosuria and acetonuria. However, even when she received more than 200 units of insulin, the urine showed persistent 5% glycosuria and moderate to large amounts of acetone. On the tenth hospital day, a regimen of prednisone was begun and, as the dose was increased to 60 mg daily, the insulin requirement and fasting blood glucose levels gradually decreased (Fig. 1). By the 13th day of prednisone treatment, the fasting blood glucose level was normal and the daily insulin dosage had been reduced to approimately 90 units per day. Between the 22nd and 32nd hospital days, prednisone dosage was gradually tapered and discontinued. Within four to five days after withdrawal of prednisone, insulin resistance recurred. The fasting serum glucose values exceeded 250 mg/100 ml with the patient requiring more than 100 units of beef-pork insulin daily. On the 38th hospital day, treatment with pure porcine insulin was instituted in an attempt to lower her insulin requirement. During the following nine days, while taking pork insulin, the patient's requirement averaged greater than 200 units per day with persistently elevated fasting blood sugars and glycosuria. Pure porcine insulin was discontinued and therapy with dealaninated pork insulin (DPI) was then begun. The response was dramatic. Within 48 hours, the insulin requirement fell to 40 units per day and the fasting serum glucose was 122 mg/100 ml (Fig. 1). The patient remained aglycosuric from the fourth day of DPI treatment throughout the rest of her hospitalization. The dose of DPI was cautiously reduced and then discontinued eight days after it had been started. Tolbutamide, 2 gm per day, was commenced on the 55th hospital day. On this dose, the patient had fasting blood glucose values of approximately 130 mg/100 ml and was without glycosuria. After more than a week of close observation on tolbutamide therapy, the patient was discharged.

During follow-up in the Outpatient Clinic, the patient has done well. She has felt well and has maintained her weight, and all her urine tests were negative for glucose and acetone. After discharge, fasting blood glucose values of 98 mg/100 ml and 82 mg/100 ml were noted at one and four weeks, respectively. Six months after discharge, the patient's diabetic status remains stable. Sera for insulin antibody determination and for pork insulin-binding capacity were drawn on the 48th hospital day and one and three weeks after discharge. Insulin antibodies were consistently present, and the binding capacities for pork insulin were reported as being above the highest standard with 320 units/liter in each sample examined.

Discussion

Insulin resistance is generally believed to be due to the presence of circulating antibodies which bind and inactivate insulin.[8] All patients receiving exogenous insulin eventually develop detectable titers of insulin antibodies in their sera.[9] In one study, insulin resistance was demonstrated to be directly related to the ability of the serum to bind insulin.[10] The plasma insulin-binding capacity of diabetics who are responsive to usual amounts of insulin is usually less than 20 units per liter, whereas insulin binding capacity in patients with insulin resistance is usually in excess of 50 units per liter.[11]

ACTH and corticosteroids have been efficacious in the treatment of insulin resistance and are thought to be effective because of their ability to diminish antibody formation.[12–14] Administration of these agents for longer than two weeks has been found to cause a decreased level of circulating antibodies.[15] However, it may take as long as four weeks for steroids to produce the desired result of reducing the insulin requirement in the insulin resistant patient.[16] The lowered insulin requirements may or may not persist after discontinuation of steroid therapy.[17] In the case presented, the patient responded favorably to prednisone therapy within two weeks, but the insulin resistance promptly recurred when prednisone was discontinued. Possibly, her insulin requirements would have remained low had prednisone been administered for a longer period of time.

TABLE 1

DIFFERENCES IN THE AMINO ACID COMPOSITION OF INSULINS FROM DIFFERENT SPECIES

Species	*A8*	*A9*	*A10*	*A30*
Human	threo	ser	ileu	threo
Beef	ala	ser	val	ala
Pork	threo	ser	ileu	ala
Dealaninated pork	threo	ser	ileu	ala

Pure porcine insulin has been an effective agent in the treatment of insulin resistance in some cases.[16, 18] Patients who respond to this agent usually do so within 24 to 48 hours.[18, 19] The rationale for the utilization of pure pork insulin is based on its structural similarity to human insulin. The structure of porcine insulin is depicted in Fig. 2, and the differences between human, bovine, porcine and dealaninated porcine insulin (DPI) are summarized in Table 1. Human and porcine insulin have identical structures except for the C terminal amino acid of the B chain.[15] Alteration of the insulin molecule has been undertaken in an effort to diminish its antigenicity while maintaining a high level of biologic activity. As illustrated schematically in Fig. 2, DPI is made by the enzymatic removal of the C terminal amino acid, alanine, from the B chain,[20] so that it is structurally identical to human insulin except that the latter has a threonine at the C terminal position on the B chain and the former has no amino acid in the 30 position. This removal of the C terminal alanine from the B chain does not alter the biologic activity of insulin.[21] Miller recently has suggested that the insulin antibodies to beef-pork insulin and to pure pork insulin do not cross-react with DPI. This implies that the presence of a C terminal alanine is instrumental in the production of insulin resistance.[22] If the A chain is primarily responsible for insulin antigenicity,[23] human insulin and DPI should be antigenically identical. It is possible, however, that the processing of pancreatic material alters insulin in some manner that ren-

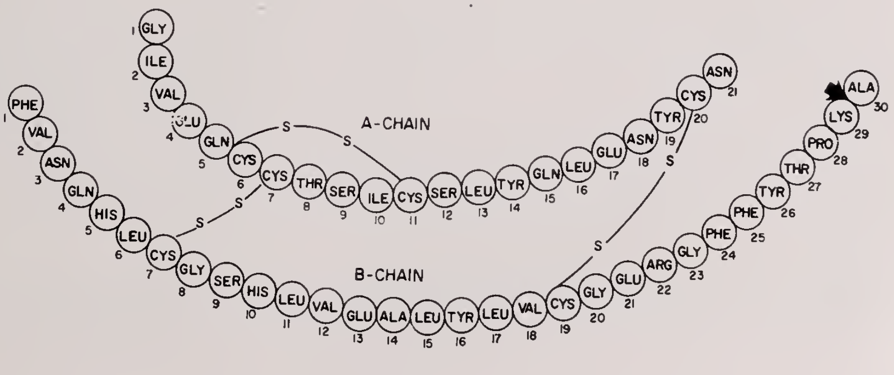

Fig. 2 Structure of porcine insulin. Arrow indicates site at which the C terminal alanine is removed to produce DPI.

ders it antigenic even for its own species.[24]

In spite of the theoretical advantage of DPI over pure pork insulin, the latter has been at least as effective in treating insulin resistance in the experience of some investigators.[15, 20] Boshell *et al*[25] have previously reported that three of seven insulin resistant patients responded equally favorably to human, porcine or DPI after being resistant to commercially available mixtures of bovine and pork insulin. Akre *et al*[20] made a similar observation in six of 11 insulin resistant patients treated with pure pork, DPI or human insulin.

The patient reported here, however, responded to DPI after failure to respond to pure porcine insulin. This dramatic response commenced within 48 hours after starting DPI and was manifested by a marked reduction in her daily insulin requirement from more than 200 units per day of pure pork insulin to 30 to 40 units per day of DPI and then to no insulin requirement. The usefulness of DPI treatment of insulin resistance with a patient unresponsive to pure pork insulin has been infrequently emphasized.[22] We believe this agent should be employed more frequently in this condition.

There are several interesting aspects of this case which merit further comment. For example, we do not know why, after seven years of good control with tolbutamide, the patient's diabetic status changed so that she required insulin in increasingly large doses, went into a severe episode of ketoacidosis and was resistant to insulin after this episode. Equally puzzling is the remarkable reversal of this sequence commencing within 48 hours after DPI was commenced. The patient's insulin requirement not only decreased but disappeared so that her diabetic status was comparable to that which existed before January, 1969. That the insulin treatment in 1962 might have influenced the development of her insulin resistance is a possibility upon which one can only speculate. Since we do not know what events initiated her resistance and because immunologic insulin resistanee may be manifested as an anamnestic response, insulin resistance could well recur in this patient.

SUMMARY

The case report of a 50-year-old woman with maturity onset diabetes mellitus who developed insulin resistance is presented. Prednisone treatment diminished the patient's insulin requirements significantly, but the insulin resistance recurred after discontinuation of prednisone. The patient failed to respond to pure porcine insulin but responded dramatically to dealaninated pork insulin (DPI), and she ultimately was controlled on diet and oral hypoglycemic agents alone. The unusual features of this case include a very rapid response to DPI after failure to respond to pure porcine insulin. We believe that DPI is a useful agent in the treatment of insulin resistance.

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Reprints: Thomas W. Burns, M.D.
University of Missouri
M749 Medical Center
Columbia, Mo. 65201

CYRIL COSTELLO, M.D., VATCHE AYVAZIAN, M.D.
and **BAHRAM NAMDARI, M.D.,** *St. Louis*

Untoward Effects—Vagotomy or Drainage Procedures?

When medical means have failed to control gastric acid, operations have been employed, all being directed at control of excessive acid. The authors describe the technique and advantage of peritoneal patch pyloroplasty as a surgical procedure proved to be safe and effective in retaining normal gastric emptying time. The authors are from the departments of surgery at Washington University School of Medicine, Barnes Hospital and St. John's Mercy Hospital.

Ulcer and hydrochloric acid have long been linked together, perhaps because both are measurable and are generally related clinically and because reduction of hydrochloric acid causes healing of most ulcers. Almost all regimens for treatment have been directed at control of gastric acid. When medical means have failed, operations have been employed ranging from gastroenterostomy, gastric resection, vagotomy and pyloroplasty to combinations of these, all being directed at control of excessive acid.

"Why is it that as one lives through one successful and superior therapeutic procedure after another, the results approach 85%?"[1] It also is provocative to observe that all procedures have been directed toward the same goal: control of acid. There are increasing suggestions that the basic disturbance in peptic ulcer disease may be an abnormal gastric emptying mechanism (GEM), which itself is not well understood, and that excessive acid is only a manifestation of this defect. While seeking surgical control of acid secretion, however, this important GEM, by intent or accident, has been subjected to adversities which do the following (Fig. 1):

1. Bypass it—as with gastroenterostomy
2. Remove it—as with gastrectomy
3. Distort it—as with Heineke-Mikulicz and Finney pyloroplasties
4. Paralyze it—as with vagotomy.

While the adverse effects of gastroenterostomy, gastric resection and vagotomy are better known, it has only recently been recognized that Finney and Heineke-Mikulicz pyloroplasties themselves may cause delay in gastric emptying, possibly accounting for some of the failures with these methods.[2, 3]

In a study of this problem, our attention was

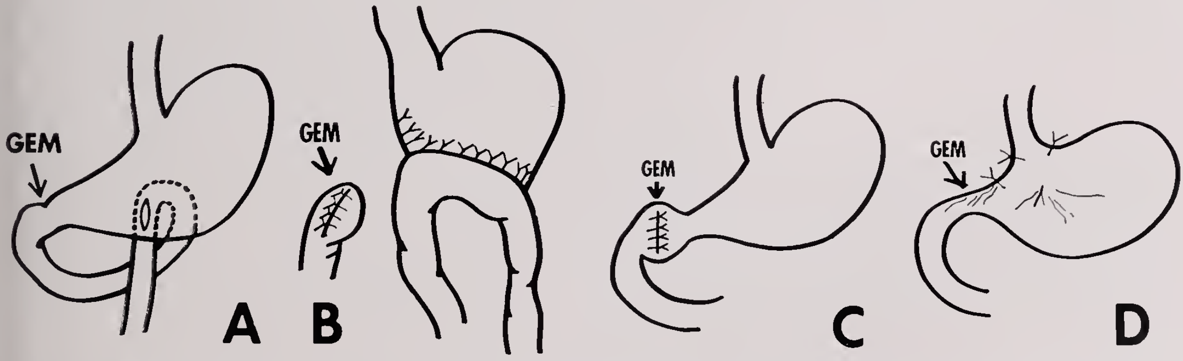

Fig. 1 Method employed to control the acid problem in peptic ulcer disease which have been directed also at the point of gastric emptying mechanism (GEM). (A) Bypass it [gastroenterostomy]. (B) Remove it [gastrectomy]. (C) Distort it [H-M and Finney pyloroplasties]. (D) Paralyse it [vagotomy].

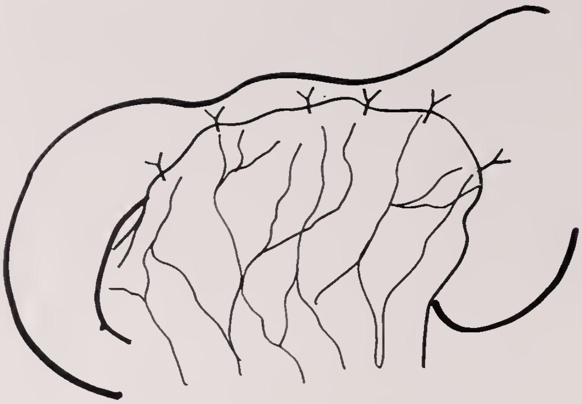

Fig. 2 Finished appearance of the antroduodenotomy with mucosal closure and omental graft as practiced by Qvist. In some instances, this has not prevented cicatricial contracture in our experience.

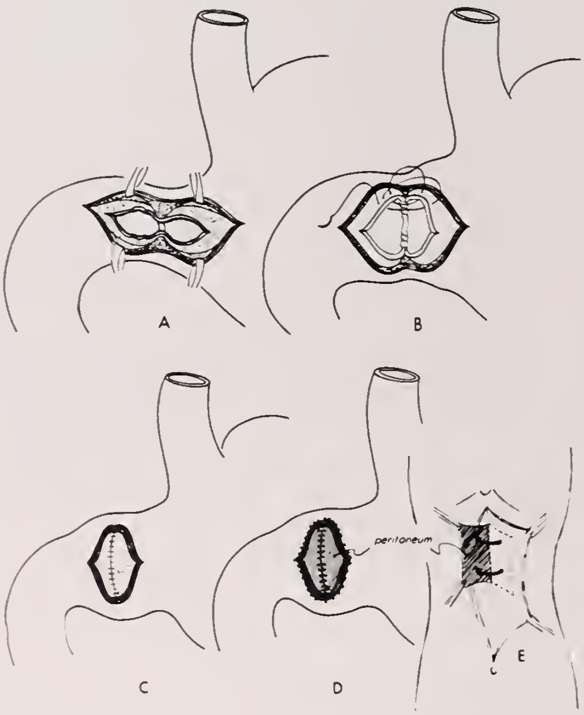

Fig. 3 Technique of peritoneal patch pyloroplasty. A. A longitudinal incision is made in the anteroir pyloric wall through sphincter and mucosa. It is then extended 5 cm into the antrum and 3 cm into the duodenum. Anterior wall ulcers, scars or tumors may be excised. B. The plane between the mucosa and the seromuscular layers is developed so as to mobilize a wide cuff of mucosa which is then closed transversely with a 2-0 chromicized catgut suture. C. The mucosal closure completed. D. & E. A free peritoneal patch dissected away from the parietes is transposed to the seromuscular defect and fixed with either interrupted or continuous marginal sutures of 3-0 dexon.

attracted to the simple observation that the commonly performed pyloromyotomy of Ramstedt, when performed for hypertrophic pyloric stenosis, has resulted in prompt relief of obstruction and absence of long term adverse effects. Certainly, normal gastric emptying seems to occur following sectioning of the pyloric sphincter, and its essential function in the GEM has remained questionable.

A disadvantage of the Ramstedt procedure, when contemplated for treatment of peptic ulcer disease, is that the duodenum is frequently involved with deformities of scar, edema, inflammation or ulcer which eventuate in cicatrix and obstruction.

Qvist[4] has accomplished pyloromyotomy without muscle closure and secured a transverse mucosal closure with an omental graft (Fig. 2). Such grafts have been followed by excessive cicatrix in duodenal closures in some of our cases, thereby creating an obstacle to improving gastric emptying. Thus, the surgical need may be threefold: (1) Allows wide exposure of the antroduodenal region for inspection, biopsy, excision or undersuturing of ulcer when indicated; (2) preserves continuity in the longitudinal neuromuscular gastroduodenal wall; (3) closes the defect safely with protection against subsequent scar contracture. Peritoneal patch pyloroplasty appears to be a method of incorporating the advantages of the Ramstedt pyloromyotomy while avoiding the disadvantages of other types of gastric emptying procedures. This method has been studied in dogs and forms the basis of this report.

Technique of Peritoneal Patch Pyloroplasty (Fig. 3)

A longitudinal incision is made through the pyloric sphincter and extended 5.0 cm through the antrum and 3.0 cm distally through the duodenum. The plane between mucosa and seromuscular layers is developed so as to mobilize a wide cuff of mucosa which is then closed transversely with a continuous 2-0 chromacized catgut suture. A peritoneal patch is dissected sharply and bluntly from the anterior abdominal wall or, even more conveniently, from the fold at the ligamentum teres. This is then applied as an onlay to the seromuscular defect and fixed with a continuous marginal suture of 3-0 dexon.

As Qvist[4] pointed out, by approximating these mucosae over the divided pyloric muscle at the proximal and distal ends of the transverse poles, a lengthened posterior wall is constructed which consists of the entire circumference of the mucosa at the pyloric ring in addition to 1 cm to 2 cm of sutured gastric and duodenal mucosae at both ends.

Experiment

1. Six healthy, adult dogs were subjected to pyloroplasty with transverse mucosal closure only.
2. Six healthy adult dogs were subjected to pyloroplasty with transverse mucosal closure reinforced with a free peritoneal patch taken from the anterior abdominal wall.
3. Control gastric-emptying time for a regular kennel feeding containing Hypaque powder was determined in three healthy adult dogs by serial x-ray examinations.
4. Six months following operations, each survivor dog:
    - A. Had gastric emptying time tests with serial x-ray examinations following a kennel meal containing Hypaque powder.
    - B. Was explored surgically for gross and microscopic biopsy examination of the pyloroplasty.

Results (Fig. 4)

1. *Controls*

Normal gastric emptying time for a kennel meal containing Hypaque powder was found to be 11 to 12 hours when studied in three healthy adult dogs by serial x-ray examinations.

2. *Pyloroplasty With Mucosal Closure Only*

Of the six dogs subjected to mucosal closure only (without peritoneal patch), one died three days postoperatively of a massive blowout of the pyloroplasty. Two others were found to have extensive adhesions between the pylorus, liver and omentum when reexplored six months later. These extensive fibrous adhesions, however, did not interfere with gastric emptying (11 to 12 hours) or with nutrition.

3. *Pyloroplasty, Mucosal Closure and Free Peritoneal Patch*

Of the six dogs with pyloroplasty, mucosal closure and free peritoneal patch, one died ten days postoperatively of evisceration unassociated with any disturbance in the pyloroplasty. Of the five long-term survivors, there was no disturbance in nutrition, and gastric emptying by serial x-ray examination was 11 to 12 hours as with the controls. At reexploration in six months, there was found to be preservation of the originally designed lumen and of the peritoneal patch by measurements. There was no circular muscle regeneration grossly or microscopically. There was no cicatrix, stenosis or extensive adhesion as found in the "nonpatch" dogs.

	MUCOSAL CLOSURE	MUCOSAL CLOSURE PLUS PERITONEAL PATCH
GASTRIC EMPTYING TIME	Normal	Normal
POST-OPERATIVE BLOW-OUT	One	None
ADHESIONS 6 MONTHS POST-OPERATIVE	Two	None
LONG TERM NUTRITION IN SURVIVORS	Excellent	Excellent
PRESERVATION OF DESIGNED LUMEN AT 6 MONTHS	All	All

Fig. 4 Results in dogs subjected to pyloroplasty with mucosal closure only and in those subjected to mucosal closure plus peritoneal patch.

Conclusions

A free peritoneal patch pyloroplasty adds the desired security of a free patch over the mucosal closure while avoiding anatomical and functional interference with the gastroduodenal stream. This type of pyloroplasty is an advantage where pyloric disease requires excision of ulcer, tumor or scar. Reestablishment of gastric drainage with least derangement of anatomy and function is accomplished and the danger of stenosis from a sliding omental graft is avoided. Results in dogs have proved this surgical procedure to be safe and effective in retaining normal gastric emptying time. It is presently being used in humans instead of other types of gastric drainage procedures. A long term follow-up of these patients is being planned.

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Reprints: *Cyril Costello, M.D.*
Suite 442, Mercy Doctors Building
621 S. New Ballas Rd.
St. Louis, Mo. 63141

DAVID J. FUGAZZOTTO, M.D.,
V. F. BURRY, M.D. *and* A. N. THURN, *Kansas City*

Selective Tympanocentesis in Children

A Study

Otitis media is a common disease in the pediatric age group, and making an accurate clinical diagnosis often presents a problem. The disease probably is overdiagnosed and, as a result, overtreated since most children given this diagnosis are placed on antibiotic therapy. Many investigators[1-6] have studied acute exudative otitis media by needle aspiration in order to make a bacteriologic diagnosis. In most series, there is a high percentage of sterile aspirates.[7] This study was done to determine the incidence of bacterial isolation in acute otitis media when rigid criteria are observed. The report also is concerned with the degree of correlation between the bacterial isolate from the middle ear fluid, the flora of the nasopharynx and throat and the degree of correlation between the organism cultured and the Gram stain of the same exudate.

Materials and Methods

One hundred randomly selected children (69 male and 31 female) were evaluated. The age range was from two months to 13 years. A smaller number of older children in the series can be accounted for by the smaller incidence of the disease and the difficulty in obtaining good cooperation during the aspiration procedure. All cases had definite bulging of the tympanic membrane, associated with erythema of at least two thirds of the drum or bullous myringitis.

Nearly all had fever, either at the time of tympanocentesis or by history, in the previous 24 hours. Ear canals were prepared prior to aspiration by flushing or swabbing with a benzalkonium preparation. Local analgesia was not routinely used. Under direct vision, the tympanic membrane was entered in the lower posterior quadrant. Exudate obtained by needle aspiration was inoculated on blood and chocolate agar and a Gram stain was made of a drop of the same material. The smears were interpreted by the house officer performing the procedure. Nasopharyngeal and throat swabs were cultured in the same manner at the time of tympanocentesis. The 100 cases includes seven children with bullous myringitis. Thirteen of the 100 patients had antibiotic treatment from one to 14 days prior to aspiration without clinical improvement.

Results

Of 100 aspirates, 78 patients yielded 81 organisms, including *D. pneumoniae, H. influenzae, hemolytic* or *nonhemolytic staphylococcus, Neisseria sp., Streptococcus pyogenes* or *alpha-hemolytic streptococcus.* Two cases had both *D. pneumoniae* and *H. influenzae* and one case had both *D. pneumoniae* and *Neisseria sp.* These data are shown in Table 1 by age group. The correlation of the ear aspirate with the

TABLE 1

ORGANISM IN ASPIRATE BY AGE GROUP

	0-6 mo	*7-12 mo*	*1-2 yr*	*2-4 yr*	*>4 yr*	*Totals*
D. pneumoniae*	8	4	4	8	9	33
H. influenzae*	6	9	7	7		29
Hemolytic and non-hemolytic staphylococcus	4	6		2	1	13
Neisseria sp.	1	1		1		3
Streptococcus pyogenes	1		1			2
Alpha-hemolytic streptococcus		1				1
						81

* Two cases grew D. pneumoniae and Neisseria sp. One case grew H. influenzae and Neisseria sp.

nasopharyngeal and throat cultures was poor. In this series, the organism found in the middle ear also was isolated from the nasopharynx in 48% and the throat in 57% of the cases. This is in close agreement with other studies.[1, 4, 5] Only two aspirates grew *Streptococcus pyogenes.* One of these was from a 15-month-old boy with hemorrhagic bullous myringitis.

Table 2 shows the age distribution of the positive cases and the Gram stain correlation. Of the 64 positive cases in which a Gram stain was done, the organism was identified on the smear in 80%. However, in 18 remaining cases in which culture of the exudate was sterile, an organism was seen or thought to be seen on 11 of the stained smears. The identification of an organism, i.e., its morphology and Gram stain properties, was dependent upon the experience and expertise of the house officer. This improved as the study progressed. Another possibility for the false positives was that the organism was not viable or was not present in sufficient numbers to isolate on routine culture.

All 29 cases of *Hemophilus influenzae* otitis occurred in children under four years of age. This included nine of 13 children who were treated with antibiotics prior to aspiration. The "treated" children had received either parenteral long-acting penicillin, an oral penicillin or erythromycin from one to 14 days earlier but failed to improve. The aspirates from the remaining four "treated" patients were sterile.

Discussion

This study was concerned primarily with isolation of bacteria from bulging tympanic membranes. Viral cultures were not performed. Mortimer and Watterson[5] have shown an incidence of bacteria in middle ear exudates of between 50% and 60%. Coffey's series[3] also is comparable. Our isolation of 81 organisms from 78 patients is relatively high. Those aspirates which contained hemolytic and nonhemolytic staphylococcus were included because they were in pure culture in moderate to heavy growth.

TABLE 2

CORRELATION OF GRAM STAIN WITH ASPIRATE CULTURE

		% Correlation
0-6 mo	13/14	93
7-12 mo	11/17	65
1-2 yr	9/11	82
2-4 yr	10/13	77
>4 yr	8/9	89
Totals	51/64	80

Results of this duo-purpose study indicate that when strict diagnostic criteria are followed, the incidence of bacterial isolation in otitis media in children is high. Tympanocentesis is shown to be a safe procedure which can give important information to the clinician interested in accurate diagnosis. It also can be therapeutic. The authors are from The Children's Mercy Hospital where Dr. Fugazzatto is a Pediatric Resident. Dr. Burry also is Associate Professor of Pediatrics, University of Missouri-Kansas City School of Medicine.

Of the seven cases of bullous myringitis in the series, five had bacterial etiology. This is an interesting finding since this condition is usually considered to be a result of viral infection.[8] Although treatment and complications are not the focus of this report, needle aspiration did seem to give immediate relief of pain in many cases. The Gram stain and culture information was generally followed by specific antimicrobial therapy. Follow-up of a large number of these children showed the tympanic membrane to be healed and dry 24 to 72 hours after aspiration and institution of proper antibiotic therapy.

Summary

When strict diagnostic criteria are followed, the incidence of bacterial isolation in otitis media is high. The most frequent offenders continue to be *D. pneumoniae* and *H. influenzae.* The latter is less likely if the child is four years old or older. Nasopharyngeal and throat cultures are not reliable indicators of the organism in the middle ear exudate. The Gram stained smear of the exudate is much more reliable, especially as experience is gained in interpreting the smear.

Tympanocentesis is a safe procedure which can be therapeutic. It can give important information to the clinician interested in accurate diagnosis. Aspiration may be especially valuable when signs and symptoms of infection continue in spite of apparently adequate antimicrobial treatment.

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(Continued on page 375)

RICHARD B. SHAW, M.D., ***Columbia***

Uterine Leiomyosarcoma at Ellis Fischel State Cancer Hospital

Case Report

Leiomyosarcoma of the uterus is a relatively rare entity reported only sporadically in the literature. In the past ten years, small series of cases have appeared in the English-speaking literature at the rate of one or two per year. A recent case seen at Ellis Fischel State Cancer Hospital (EFSCH) prompted this review of the English literature and, also, a review of the experience at the EFSCH.

Excellent records with virtually 100% follow-up add to the valuable fund of information available at EFSCH. However, only seven cases have been seen and treated in the years from 1940 to 1971, only three of which were primarily diagnosed at EFSCH. The others were referred there for therapy after metastatic disease was established. In that same time period, approximately 40,000 patients were seen at this institution. This surprisingly small incidence of leiomyosarcoma at a specialty cancer hospital reflects the rarity of the lesion. As no one individual or institution has accrued a large series, it is felt that reports of relatively small numbers of cases are valuable in adding to the total fund of knowledge of the lesion covered by the literature.

Case Report

A 51-year-old white woman was first seen at the EFSCH on June 25, 1971 with a history of having completed her menopause approximately 18 months previously and then developing vaginal bleeding which had been continuous for the previous two months. Her local physician detected an exophytic cervical lesion (Pap smear was class II). The patient was gravida VI, para IV, aborta II. Past history revealed a right oophorectomy and appendectomy in 1959. Physical examination was unremarkable except for the findings on pelvic examination. A large necrotic mass was present in the apex of the vaginal vault. Biopsy revealed inflammatory tissue. Her entire diagnostic work-up was otherwise unremarkable, including sigmoidoscopy, cystoscopy, chest x-ray, intravenous pyelogram, barium enema, upper gastrointestinal series, gallbladder series and electrocardiogram.

A second biopsy was obtained and again showed acute inflammation with some areas of necrosis and granulating tissue and, also, dilated vessels with prominent endothelial linings and atypical proliferation of fibroblasts. However, no tumor was recognized. On July 1, the patient was taken to the operating room, and this mass was grasped with a tenaculum and gently retracted toward the introitus. It came out yielding very little resistance. The mass appeared to be a polyp approximately 5 cm x 5 cm and 6 cm in diameter with a small stalk. It was fairly obvious that this was an endocervical polyp arising either in the cervix or in the endocervical and presenting in the endometrial canal. The distal half was necrotic because the blood supply was compromised by the resistance to stretching of the cervix. The inner or more proximal half near the stalk appeared grossly similar to a benign leiomyoma. Other than being greatly dilated, the cervix was unremarkable. Endometrial curettings and four quadrant cervical biopsies were obtained.

Pathology reported the polypoid lesion to be a grade II leiomyosarcoma, believed to be inadequately excised. The remainder of the tissue was within normal limits. On July 13, she underwent a total abdominal hysterectomy and left salpingo-oophorectomy (completion oophorectomy). The postoperative course was benign. The pathology report disclosed that there was no further identifiable leiomyosarcoma in the uterus. There was a tiny area of scarring just inside the endocervix in the endometrial cavity which probably was the area of attachment of the pedunculated polyp.

Discussion

This was an unusual case because uterine leiomyosarcoma rarely presents as a polypoid mass protruding from the cervix. Furthermore, this case prompted a review of the literature and a comparison of the EFSCH series with the literary experience. Ober[1] states that leiomyosarcoma is the most common uterine sarcoma, accounting for approximately 50% to 75% of the sarcomas of the uterus in most series. This was not the case at EFSCH because during the same time period in which seven leiomyosarcomas were seen, there were more than 30 other uterine sarcomas, e.g., mixed mesodermal sarcomas, carcinosarcomas and others.

The average age of our seven patients at the time of their initial diagnosis was 64.5 years. Most reports show lower ages. All the patients seen at EFSCH were postmenopausal. This also is at variance with the usual findings. Most series contain roughly equal numbers of premenopausal and postmenopausal patients. In general, premenopausal patients have been shown to do better.

One additional case was encountered but not included since the patient was not treated at EFSCH for the lesion. She had been treated in 1954 for "precancerous hyperplasia of the endometrium" by intracavitary radium instillation. Her case was closed in 1957. It was fortuitously learned that the patient had a laparotomy and hysterectomy in 1966 for what proved to be leiomyosarcoma of the uterus. No further follow-up was available. The case was of interest in that many authors point to a striking incidence of leiomyosarcoma of the uterus in patients who have had previous radiotherapy to the pelvis, usually for benign uterine conditions. This is the only patient we encountered (although not in our series) who fits this category. She is mentioned simply for that reason.

The question of parity is frequently discussed, though it seems to have no relationship with the onset of this disease. Our series bears this out. Patients were equally divided between nulliparous and multiparous women. The question of race also seems to have little bearing. Of our seven patients, six were white and one was a Negro. The hospital's average Negro population runs about 2%. With such small figures, however, nothing significant can be made of this.

In general, our cases did poorly; only two of the seven are potentially curable. The other five have died of their disease. However, four of these patients were referred for evaluation and treatment of their metastatic lesions and, therefore, represent a worse group of patients in terms of ultimate survival, having already established metastatic disease. Prediagnostic symptoms varied in duration from one to about seven or eight months, usually consisting of some combination of vaginal bleeding or discharge, low back pain or the appearance of a mass or lower abdominal swelling. Metastatic lesions, of course, gave symptoms of varying duration and types depending upon their location. Fairbanks[2] points out that fever may be a very early presenting symptom. The author elsewhere personally observed a case in which this was true. It is of note that in our series, no patient seemed to manifest fever either before the diagnosis of leiomyosarcoma or with the metastatic lesions of leiomyosarcoma.

Bell and Edgehill[3] emphasize the relatively high incidence of double or multiple malignancy. Only one of our seven patients gave a history of previous carcinoma, and that was a cancer of the left breast for which mastectomy was performed some 30 years previously. No coincident gynecologic cancers were found.

Four patients were treated for metastatic disease, and three were treated primarily. One patient had a preoperative diagnosis of ovarian cancer and did not undergo dilation and curettage (D & C). At laparotomy, a huge uterus with apparent attachment to other intra-abdominal and pelvic structures was noted. Because the patient was 78 years of age and, more particularly, because her response to the laparotomy was very poor, it was elected not to further treat this patient but simply to biopsy the mass to verify the diagnosis. She died at home five months later of either uremia or small bowel obstruction. In this patient, the preoperative diagnosis was not properly entertained.

Hindle[4] points out that the preoperative diagnosis is correctly established in only 40% of the cases. Our other two cases which were treated primarily did have the diagnoses established prior to their definitive treatment. Newton[5] points out that in his experience, if the preoperative diagnosis is established properly, i.e., by D & C or cervical biopsy or endometrial curettage, the

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A recent, unusual presentation of uterine leiomyosarcoma in a patient at Ellis Fischel State Cancer Hospital prompted the author to review that institution's experience with this lesion and compare it to the literature. The surprisingly small incidence of leiomyosarcoma at this specialty cancer hospital reflects the rarity of the lesion. Dr. Shaw is from the Department of Surgery, Washington University School of Medicine, St. Louis and Ellis Fischel State Cancer Hospital.

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mortality rate is at least 67%. Our two patients, who had their diagnoses established preoperatively, probably represent a more favorable outlook. Our second patient was 54 years old at the time of her treatment. She underwent two diagnostic D & C's, on the second of which the diagnosis of sarcoma of the uterus was made (this constitutes a relatively correct preoperative diagnosis). She underwent total abdominal hysterectomy, as did the patient described here. She also had bilateral salpingo-oophorectomy. Her survival is 16 years to the present time.

The only definitive treatment mentioned in the literature is total abdominal hysterectomy and bilateral salpingo-oophorectomy. No arguments are advanced for doing myomectomies alone, even in patients who seem to have leiomyosarcomas arising in previously existing leiomyomata.

It is stated that in premenopausal women, normal appearing ovaries can be left in place without any sacrifice in terms of mortality. Inasmuch as there seem to be no metastases to the ovaries, this would seem warranted. The other four cases seen at this institution after primary treatment elsewhere all had total abdominal hysterectomy as their primary treatment, the status of the ovaries being unknown in all cases.

The criteria necessary to establish the diagnosis of leiomyosarcoma are debated in the literative. Bartsich,[6] for example, tries to rule out the so-called "cellular leiomyomas" which he feels are clinically benign fibroids with just slightly different microscopic appearances. In his series, this leaves only the invasive forms of leiomyosarcoma in which he would make that definitive diagnosis. In his experience, these are 100% lethal. This is not surprising in that Montague[7] points out, for example, that extension beyond the uterus has proven to be universally fatal. In the three cases treated primarily at the EFSCH, this seemed to be true. The lady who had no definitive treatment but had simply biopsy at the time of her laparotomy apparently had considerable extension beyond the uterus to adjacent pelvis viscera and loops of bowel. She had a relatively rapid termination. The other two patients apparently had leiomyosarcomata arising in previous leiomyomas, which were submucosal in origin. The tumors did not appear to extend into the endometrium in either case and, therefore, not beyond the leiomyoma. Consequently, it was not invasive in either case (our index patient had no other coincidental leiomyomata, whereas the other patient had one coincidental subserous leiomyoma). Neither patient, therefore, would fulfill Bartsich's criteria for the diagnosis of leiomyosarcoma. But this is only one point of view.

The more common viewpoint is that the diagnosis of leiomyosarcoma should be based on histologic grounds alone and not on macroscopic invasion of other organs or the depths of the myometrium. Radman[8] stresses the particularly bad nature of the lesion if it is a so-called "primary lesion" vs the relatively good prognosis if the lesion is a "secondary lesion," that is, arising in a myoma. This is borne out by our two surviving patients, one being a 16-year cure and the other, hopefully, having a good prognosis.

Sprio[9] points out the inadequacies of the conventional histologic criteria as a guide for the behavior of some of the well differentiated, smooth muscle tumors. Several other authors disagree. Gudgeon[10] asserts that "symplastic cells" often referred to in the literature (which are multi-nucleated giant cells) are probably indicative of the benignity of a lesion rather than its malignancy. Criteria favoring the malignant end of the spectrum, as pointed out by Laberge,[11] are anaplasia and high mitotic counts. Both carry a poor prognosis. Laberge, at the opposite end of the spectrum, claims that histologic criteria alone are helpful in indicating the prognosis of the patient. This also was found to be true by Spiro and Koss,[12] who, in their series from Memorial Hospital, reported close to 100% cure rates with what they called stage I lesions, whereas stage II lesions had an approximate 20% cure rate. At stages III and IV, there were virtually no survivors. The stages were based simply on histologic criteria. Once again, they pointed out that leiomyosarcomas arising in previous leiomyomas (which they do consider true leiomyosarcomas if they have the proper histologic appearance) have a much better prognosis.

Boutselis and Ullery[13] report that distant metastases lead the causes of death from uterine leiomyosarcoma particularly lung metastases. In our series, distant spread was apparently not responsible for the death of one elderly lady who had laparotomy for biopsy only. She apparently died for reasons of local extension, which were either bowel or ureter obstruction. One other patient among our five, who were definite nonsurvivors, was referred for treatment of metastatic lesions consisting of peritoneal metastases. These metastases produced multiple partial intestinal obstructions which ultimately became high grade. The patient died of intestinal obstruction nine months following her initial treatment, which had consisted of hysterectomy and coincidental segmental small bowel resection and sigmoid resection. This patient obviously represented far advanced disease at the time of her initial treatment with extension beyond her uterus at that time. It is no wonder that she developed further signs of peritoneal metastases and ultimately succumbed to the same.

So, two of our five deaths were due to nondistant metastatic disease. The other three clearly died of distant metastases. All three had lung metastases plus other areas of metastatic disease. One patient bears some special note. She is a patient previously mentioned who had a mastectomy for breast cancer 30 years prior to the diagnosis of uterine leiomyosarcoma. She was referred because of chest lesions seen by x-ray. Because it could not be established without thoracotomy whether the chest lesions were metastatic breast or metastatic uterine cancer, the patient underwent exploratory thoracotomy and the lesions turned out to be leiomyosarcoma. Since they were easily resectable, however, she underwent a lobectomy for one and a wedge resection for the other. This patient died six or seven months after the thoracotomy, but she represented a 55-month survival after the initial hysterectomy. She probably fits in toward the benign end of the spectrum having gone so long after the initial treatment until the appearance of her metastatic disease. Before her termination, she also developed a bony chest wall metastases, but ultimately died of pneumonia and respiratory failure based on lung parenchymal metastases. The other two patients who had lung metastases were less fortunate and died seven to ten months, respectively, after their hysterectomies. Both died of respiratory failure. In addition to lung metastases, one also had recurrence at the vaginal cuff.

SUMMARY

A recent, unusual presentation of uterine leiomyosarcoma seen in a patient at Ellis Fischel State Cancer Hospital prompted a review of this institution's experience with this lesion and a comparison with the literature. The overall survival rate of this small series of seven patients is at best 2:7. However, four were referred for treatment of already established metastatic disease.

It is agreed that primary treatment should consist of total abdominal hysterectomy. The criteria for establishing the diagnosis are discussed at length in relation to comments of other authors. Lesions without invasion of the uterine stroma or adjacent structures (as in the index case) carry the best prognosis. Histologic criteria are likewise important prognostic signs. Causes of death of the five nonsurvivors are discussed. One additional case not in the series is mentioned only for its relationship to previous pelvic irradiation.

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Selective Tympanocentesis

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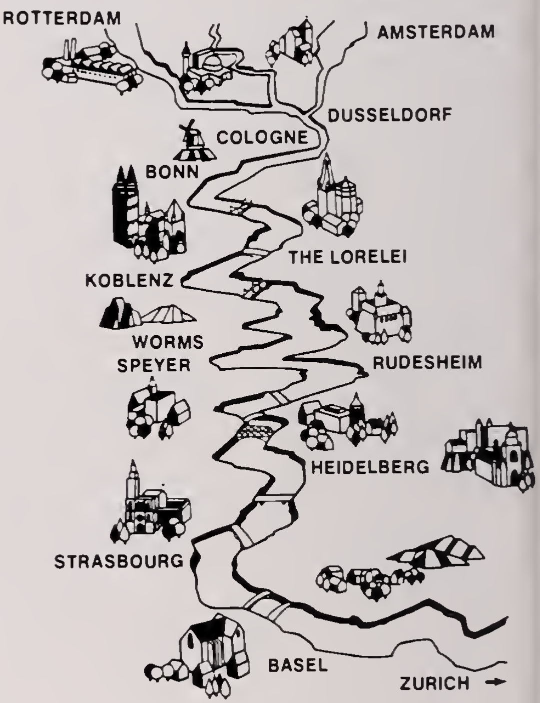

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President's Message

WHAT'S NEXT FOR MEDICINE?

During the past few months, two national laws involving the practice of medicine have been passed—PSRO and HMOs. The next major move on Capitol Hill will be some form of national health insurance. American medicine is at the threshold of long-range shifts in financing and delivery of health care services. This has been made obvious by the many legislative proposals. They vary from the compulsory health services modeled after the British or Swedish plans to one that we now have in Medicare and Medicaid. Hopefully, the changes will be financial in nature and with a minimal amount of controls over the providers.

There may be attempts to develop a "production line" type of efficiency for the delivery of medical care. But a health services system can *never* approximate the industrial model as long as patient needs and demands are as varied as they are and the physician is given the professional freedom to diagnose and treat patients as he deems necessary. Dr. C. A. Hoffman, our AMA President, also points out that good medical care and good health are not the same thing. The first may be considered a person's right, but good health is one's own responsibility and cannot be legislated.

However, Congress will try to do so. So, we must hope for a national health policy like Medicredit, which has been created by the AMA and already has 167 sponsors among the legislators. It would take care of the poor and the aged and has the important catastrophic clause which would cover long-term illness and severe accidents. Even the families who want to—and usually can—provide for themselves cannot cope with the expense of prolonged illness. They greatly fear this possibility.

E. A. Stricker, M.D.

Medicredit is voluntary and protects the physician-patient relationship even while making insurance coverage available to everyone. It would work on a sliding-scale system of income tax credit, allowing persons to buy health protection from private insurers. Also, it could be handled through existing channels without creating another massive and costly federal bureaucracy.

Medicredit is a plus for doctors and for the AMA because it is a positive and helpful approach to the health care problem. It is giving us a much better image with the lawmakers, even though the picture is not yet fully developed.

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Woman's Auxiliary

50th Anniversary

Spring has meant "Rally Days" to members of the MSMA Woman's Auxiliary this year, and rally they did to our district meetings in St. Charles, St. Louis, Joplin, Springfield, Kansas City, Cape Girardeau, Columbia and Sedalia. We are grateful for their cooperation.

Mrs. Charles R. Willman
President

Success of the meetings can be attributed to Mrs. William McPhee of Jackson County, our President-Elect; Mrs. Truman Schertz of Clay County; and Mrs. John Balhuizen of Clay County. As members of our state Program Development Committee, they worked with the State Auxiliary's ten district directors and all county auxiliary presidents.

The Woman's Auxiliary has initiated an inspiring *Five Point Tel-Star Program* which we believe will increase auxiliary service opportunities throughout the state and attract the membership of many doctors' wives who have yet to join the Auxiliary. The program was explained at each district meeting by members of a special traveling team, as follows:

★ **TEL-E-MEMBER**—Mrs. George Lytton of Kansas City, President-Elect, explained this point which is concerned with increasing our membership and, in turn, increasing the effectiveness of our efforts on behalf of good legislation. If your wife is not an auxiliary member or member-at-large, please ask her to contact Mrs. Donald Fakhoury, 4332 N. Central, Kansas City 64116.

★ **TEL-E-PROGRAM**—Mrs. McPhee discussed this point of the star which offers 13 excellent package programs developed to focus public attention on current health needs and to help county auxiliaries plan and implement these programs. Subject matter includes Nutrition, Alcohol, Physical Fitness, Drug Abuse, Immunization, Smoking, Sex Education, Teenage Venereal Disease, Blood Donors and Mental Health of Children.

★ **TEL-E-COMMUNITY**—This plan suggests Auxiliary-sponsored Health Education Conferences in our communities as a means of raising the level of awareness of the vital need for all citizens to develop a sense of personal and community responsibility for solving health problems.

★ **TEL-E-YOUTH**—Health Manpower, the AMA-Educational Research Fund and the Missouri State Medical Foundation (student loan fund) are included in this program, which was explained by Mrs. Larry Ozenberger of Plattsburg, AMA-ERF Chairman of the MSMA Auxiliary. The goals are to continue to interest young people in health careers and further support the two loan funds. The AMA-ERF provides funds for students and medical schools throughout the nation. The MSMF provides financial assistance for medical students in Missouri. We urge you to send your contributions today for the MSMF to Mrs. James Gordon, 600 Boonville Rd., Jefferson City 65101.

★ **TEL-E-LEG**—This new program also is known as LEGS or Legislative Effort Group System, which is a unique communications system that Auxiliary members will use to assist the MSMA by conveying on a moment's notice the views of Missouri physicians to county, state or national legislators and others who are concerned. Mrs. Gerald L. Miller of Kansas City is the State Auxiliary Legislation Chairman and the team member involved with this point.

We hope that the Auxiliary *Tel-Star* program will capture the interest of the MSMA members, also . . . and that you'll watch this page in future issues for news of further developments.

EDITORIAL

ALL FOR $1.50

I suppose this is not the spot for a book review, but perhaps it is—at least for this one. As an introduction, may I quote a personal experience.

My grandfather died when I was in high school. He and I were very close, as it has usually been when age and experience still had some value. Even as a boy, I respected him because I knew he worked hard, was successful, realistic and practical. Therefore, even though I knew little of such things, it came as a shock to me when my grandfather departed this life without a will. He was well along in his 70s and he certainly had ample warning to prepare for death.

Fortunately, the family behaved as my grandfather would have expected. The necessary signatures were obtained and my grandmother was provided for as everyone knew was intended, but all this took time, effort and probate expense. Much of that could so easily have been avoided. Although I found all this difficult to believe in my grandfather's case, I am much more puzzled now to find that some of my contemporaries and colleagues behave similarly. Perhaps dying without a will is not so frequent now as a generation ago, but I am told by an attorney-friend that the equally fundamental and critical matter of planning for the disposition of one's estate is, more often than not, never properly executed.

In these days of increasingly restrictive laws and confiscatory taxes, it is not easy to accumulate an estate. Therefore, how much more foolish it becomes not to utilize every legal means to see that what is accumulated is disposed of as desired by the person who worked to acquire it. That great jurist, Learned Hand, wrote ". . . there is not even a patriotic duty to increase one's taxes." But that is precisely what occurs when estate planning is not done. The great recipient is Uncle Sam.

This is a long-winded way of recommending a book. Every person who reads this editorial and who has not studiously considered the disposition of his worldly goods should purchase this book and should be quick about it. This book is "The Complete Estate Planning Guide," by Robert Brosterman (paper bound, Mentor Executive Library, MW-1015, $1.50). This book is updated to include present laws, has gone through many printings and is widely used popularly and in college and graduate courses. It is easy to read, full of sensible advice and startling warnings. It will certainly convince the reader of the advisability of putting his affairs in order and periodically doing it all over again as his estate diminishes or increases. This book, by no means, will replace good legal counsel, but it will make the estate owner a vastly better informed individual when he goes to his attorney.

Proper planning for the disposal of one's estate, large or small, may not insure peace for a man's soul, but it should do much for his peace of mind.

WILFRED E. WOOLDRIDGE, M.D.
Springfield

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County Society News

FIRST DISTRICT

COUNCILOR
JOHN N. MARTIN, M.D., ST. JOSEPH

BUCHANAN COUNTY MEDICAL SOCIETY

The annual "Cancer" meeting of the Buchanan County Medical Society was held on April 4 following a dinner at the Hotel Robidoux in St. Joseph.

The program was sponsored by the Buchanan County Unit of the American Cancer Society. The speaker was Virgil Loeb, Jr., M.D. of St. Louis, who presented a paper on "Medical Oncology—An Emerging Specialty."

An instructor and researchers in the field of cancer, Dr. Loeb told of advances in chemotherapy treatment of cancer, particularly leukemia. He also cited the possibilities in cancer treatment by immunology.

Dr. Loeb was introduced by Mr. Richard J. Knox, executive director of the Buchanan County and Northwest Missouri units of the Cancer Society. Mr. Knox was honored at the meeting with a resolution of appreciation for his effective work in combatting cancer and for his civic contributions to the community.

The program and meeting were arranged by members of the Society's program committee, who are Dr. Gerald E. Fox, chairman; Dr. Edward M. Beheler; and Dr. Sydney L. Bryant.

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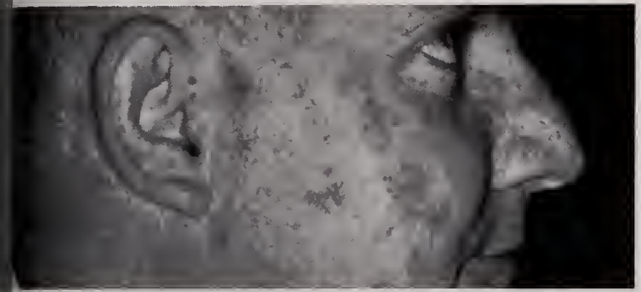
nd sharply defined. They commonly occur as multiple
sions, chiefly on the exposed portions of the skin.



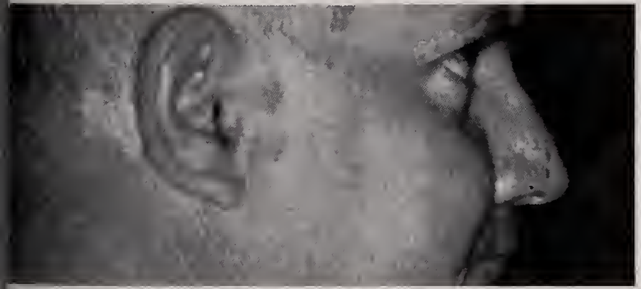
atient P.T. seen on 3/29/67 shows typical lesions of*
oderately severe keratoses. Note residual scarring on
dge of nose from previous cryosurgical and electro-
urgical procedures.

equence of therapy/
electivity of response

fter several days of therapy with Efudex® (fluorouracil),
ythema may begin to appear in the area of the lesions;
e reaction usually reaches its height of unsightliness
nd discomfort within two weeks, declining after dis-
ontinuation of therapy. This reaction occurs in affected
reas. Since the response is so predictable, lesions that
o not respond should be biopsied.

cceptable results

reatment with Efudex provides highly favorable cos-
etic results. Incidence of scarring is low. This is
articularly important with multiple facial lesions.
fudex should be applied with care near the eyes, nose
nd mouth.



atient P.T. seen on 6/12/67, seven weeks after discon-*
inuation of 5%-FU cream. Reaction has subsided.
esidual scarring not seen except for that due to prior
urgery. Inflammation has cleared and face is clear of
eratotic lesions.

ata on file, Hoffmann-La Roche Inc., Nutley, N.J.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.
Contraindications: Patients with known hypersensitivity to any of its components.
Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.
Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.
Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.
How Supplied: Solution, 10-ml drop dispensers —containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.
Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

This patient's lesions were resolved with

Efudex®
(fluorouracil)

5% cream/solution
...a Roche exclusive

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Nutley, N.J. 07110

Antivert®
(meclizine HCl)
for vertigo*

...and then on to Venice

ndicated in the management of nausea,
miting and dizziness associated with mo-
n sickness.

'ound useful in the management of verti-
associated with diseases affecting the ves-
ular system.

Available as Antivert® (12.5 mg. meclizine
Cl) blue and white scored tablets and also
Antivert®/25 (25 mg. meclizine HCl) yel-
v and white scored tablets.

INDICATIONS. Based on a review of this drug by
the National Academy of Sciences-National Research
Council and/or other information, FDA has classified
the indications as follows:

Effective: Management of nausea and vomiting and
dizziness associated with motion sickness.

Possibly Effective: Management of vertigo asso-
ciated with diseases affecting the vestibular system.

Final classification of the less than effective indica-
tions requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12th-15th day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG *Pfizer*
A division of Pfizer Pharmaceuticals
New York, New York 10017

New Members

Unit Aker, M.D., 4550 Scott, St. Louis, has become a member of St. Louis Medical Society. Dr. Aker is a native of Ankara, Turkey, received his preliminary education at Istanbul University and his M.D. degree at Instanbul University in 1954. He specializes in internal medicine.

William A. Alonso, M.D., 4989 Barnes Hospital, St. Louis, has become a member of St. Louis Medical Society. Dr. Alonso is a native of Puerto Rico, received his preliminary education at Amherst College and his M.D. degree at Yale University in 1964. He specializes in otolaryngology.

Jennifer D. Ashby, M.D., 24th and Cherry, Kansas City, has become a member of Jackson County Medical Society. Dr. Ashby is a native of England, received her preliminary education at St. Thomas Hospital and her M.D. degree at the University of London in 1962. She specializes in dermatology.

Edito C. Cabal, M.D., VA Hospital, St. Louis, has become a member of St. Louis Medical Society. Dr. Cabal is a native of the Philippines, received his preliminary education at Manila, Philippines and his M.D. degree at the University of Philippines in 1965. He specializes in radiology.

Kyu S. Cho, M.D., 4919 Forest Park, St. Louis, has become a member of St. Louis Medical Society. Dr. Cho is a native of Korea, received his preliminary education at Yon-Sel University and his M.D. degree at Yon-Sel University in 1958. He specializes in orthopedic surgery.

Enrique Cubillo, M.D., 510 S. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Cubillo is a native of Spain, received his preliminary education at Institute Miguel Cervantes and his M.D. degree at the University of Madrid in 1962. He specializes in radiology.

Corazon deLeon Estrada, M.D., 2644 Hadden, St. Louis, has become a member of St. Louis Medical Society. Dr. Estrada is a native of the Philippines, received his preliminary education at the University of Philippines and his M.D. degree at the University of Philippines in 1955. He specializes in internal medicine.

Jesus I. Estrada, M.D., 2644 Hadden Dr., St. Louis, has become a member of St. Louis Medical Society. Dr. Estrada is a native of Philippines, received his preliminary education at Cosmopolitan Colleges and his M.D. degree at the University of Santo Tomas in 1952. He specializes in general surgery.

James A. Felts, M.D., 660 S. Euclid, St. Louis, has become a member of St. Louis Medical Society. Dr. Felts is a native of Marion, Ill., received his preliminary education at DePauw University and his M.D. degree at Northwestern University in 1946. He specializes in anesthesiology.

Paul G. Fetick, M.D., 9730 E. Watson Rd., St. Louis, has become a member of St. Louis Medical Society. Dr. Fetick is a native of Cincinnati, Ohio, received his preliminary education at John Carroll University and his M.D. degree at St. Louis University in 1946. He specializes in pediatrics.

Joseph R. Gerdes, M.D., 522 Professional Bldg., Kansas City, has become a member of Jackson County Medical Society. Dr. Gerdes is a native of Alliance, Neb., received his preliminary education at St. Benedicts College and his M.D. degree at the University of Nebraska in 1966. He specializes in industrial medicine.

C. Giannellis, M.D., 1035 Bellevue, St. Louis, has become a member of St. Louis Medical Society. Dr. Giannellis is a native of Greece. He received his M.D. degree at the University of Athens in 1963. He specializes in ophthalmology.

Christopher G. Gifford, M.D., 1012 N. Main, Sikeston, has become a member of SEMO County Medical Society. Dr. Gifford is a native of Belle Plains, Ia., received his preliminary education at Creighton University and his M.D. degree at Creighton University in 1967. He specializes in pediatrics.

Kin-Tzeng Ho, M.D., 1125 Graham Rd., Florissant, has become a member of St. Louis County Medical Society. Dr. Ho is a native of Japan, received his preliminary education at National Taiwan University and his M.D. degree at National Taiwan University in 1962. He specializes in pediatrics.

James D. Jones, II, M.D., Barnes Hospital Plaza, St. Louis, has become a member of St. Louis Medical Society. Dr. Jones is a native of Greensboro, Ala., received his preliminary education at Louisiana State University and his M.D. degree at the University of Alabama in 1957. He specializes in anesthesiology.

Sam E. Kinney, M.D., 4949 Forest Park, St. Louis, has become a member of St. Louis Medical Society. Dr. Kinney is a native of Cleveland, Ohio, received his preliminary education at Dennison College and his M.D. degree at Western Reserve in 1964. He specializes in otolaryngology.

Ralph Kuhlman, M.D., 100 N. Euclid, St. Louis, has become a member of St. Louis Medical Society. Dr. Kuhlman is a native of Ironton, received his preliminary education at the University of Illinois and his M.D. degree at the University of Illinois in 1964. He specializes in internal medicine.

Isaias Lansangan, M.D., Box 796E, Arnold, has become a member of St. Louis Medical Society. Dr. Lansangan is a native of Philippines, received his preliminary education at the University of the East and his M.D. degree at the University of the Philippines in 1964. He specializes in internal medicine.

Aziz Olla Mahboubi, M.D., 931 Hawthorne Dr., Sikeston, has become a member of SEMO County Medical Society. Dr. Mahboubi is a native of Iran, received his preliminary education at Meshed-College and his M.D. degree at Tehran University in 1962. He specializes in urology.

Marcos C. Nalagan, M.D., 6651 Chippewa, St. Louis, has become a member of St. Louis Medical Society. Dr. Nalagan is a native of Philippines, received his preliminary education at the University of Santo Tomas and his M.D. degree at the University of Santo Tomas in 1963. He specializes in internal medicine.

Gokul S. Singhal, M.D., 4524 Tariton Dr., St. Louis, has become a member of St. Louis Medical Society. Dr. Singhal is a native of India, received his preliminary education at Government International College and his M.D. degree at Sarojini Najdu Medical College. He specializes in internal medicine.

Renu Singhal, M.D., 4524 Tariton, St. Louis, has become a member of St. Louis Medical Society. Dr. Singhal is a native of India. He received his M.D. degree at King Georges in 1967. He specializes in pediatrics.

Emily Smith, M.D., 510 S. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Smith is a native of Madison, Wis., received her preliminary education at Washington University and her M.D. degree at Washington University in 1968. She specializes in radiology.

Luis Tumialan, M.D., 400 Tanglewood Dr., St. Louis, has become a member of St. Louis Medical Society. Dr. Tumialan is a native of Peru. He received his M.D. degree at San Marcos University in 1965. He specializes in pathology.

Eufemio Verzola, M.D., 8916 Eager Rd., St. Louis, has become a member of St. Louis Medical Society. Dr. Verzola is a native of Philippines, received his preliminary education at Far Eastern University and M.D. degree at Far Eastern University in 1965. He specializes in surgery.

In Memoriam

Cyril M. MacBryde, M.D., 1050 Cedargate Dr., St. Louis, a graduate of Harvard University, 1930; member of St. Louis Medical Society; age 66, died March 18, 1973.

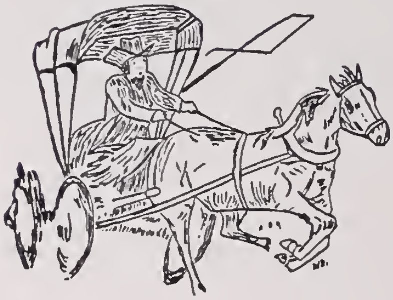
Emile Grunberg, M.D., 411 Bourn Ave., Columbia, a graduate of the University of Vienna, 1933; member of Boone County Medical Society; age 66, died April 2, 1973.

William A. Tibbs, Jr., M.D., 8128 University Drive, St. Louis, a graduate of Washington University, 1951; member St. Louis Medical Society; age 52, died April 6, 1973.

William M. Ketcham, M.D., 4550 Warwick Blvd., Kansas City, a graduate of Georgetown, 1920; member of Jackson County Medical Society; age 79, died April 9, 1973.

LEO H. POLLOCK, M.D.

Missouri Medicine in Review



FORTY YEARS AGO

Dr. Dudley S. Conley, Columbia, professor of surgery at the University of Missouri School of Medicine, has been appointed dean of the school to succeed Dr. Edgar Allen, who has tendered his resignation to become effective at the beginning of the next school year. Dr. Conley became a member of the faculty of the M.U. School of Medicine in 1919. He formerly was a member of the faculty of Columbia University College of Physicians and Surgeons, where he received his medical degree in 1906. Dr. Allen has resigned to join the faculty of the Yale University School of Medicine.

Dr. M. Pinson Neal, Columbia, was the guest of the staff of Freeman Hospital in Joplin on May 11.

The Ear, Nose and Throat Club of St. Louis has elected officers. They are Dr. L. W. Dean, acting president and senior member of the Executive Committee, and Dr. B. J. McMahon, secretary.

The Kansas City Urological Society has elected the following officers for the ensuing year: Drs. Oscar Davidson, Kansas City, Kan., president; Julius Frisher, Kansas City, vice-president; and Irwin S. Brown, Kansas City, secretary.

TWENTY-FIVE YEARS AGO

Jesse E. Douglass, M.D., Webb City, was installed as president of the Missouri Trudeau Society at a meeting on March 14. Florence MacInnes, M.D., Kansas City, was elected president-elect.

Editorial Note: "The vote of the British Medical Association reported recently in the press is a vote against bureaucratic regimentation which cannot, by any stretch of the imagination, be correctly called a 'strike vote.' At no time have our British colleagues implied a strike against those who have been and always will remain their only employers, their patients. The physicians of Britain have indicated no tendency to desert their posts of duty. Neither moral law nor the ethics of medicine require the physician to subject himself to conditions under which service to his patients will be made onerous or, because of compulsion, the keen edge of that inward desire to serve made dull. In view of these incontrovertible facts, the overwhelming objection of the doctors of Britain against the stifling hand of authoritarianism is readily understood. A life worth living is worth fighting for. The life of medical practice soon would die beneath the sterile rays of a parliamentary made practice by edict. The American people, the political weather vanes, the journalistic opportunists might well take heed."

TEN YEARS AGO

At an April meeting of the American Dermatological Association, six men were singled out for preeminence in the specialty. Among them was Richard S. Weiss, M.D., St. Louis.

Recently-elected officers of the St. Louis Gynecological Society are Drs. Milton Meyerhardt, president; Thomas M. Mier, vice-president; Carl J. Dreyer, secretary; Arthur Bortnick, treasurer; and M. H. Backer, Jr., editor.

Joseph S. Cope, M.D., Lexington, has been elected president of the Lexington Library Board.

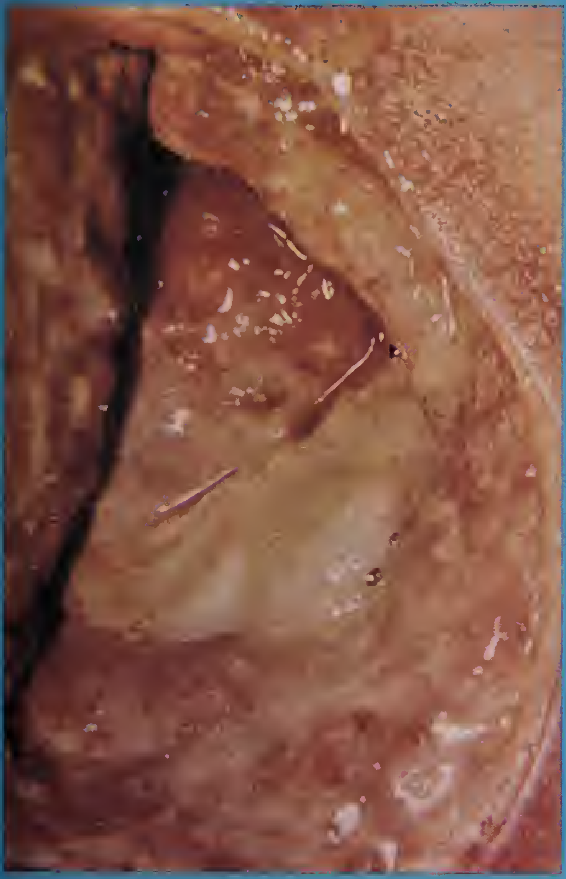
The 11th consecutive annual joint meeting of the Buchanan County Medical Society and the Northwest Missouri District Dental Society was held on May 1 in the Empire Room of Hotel Robidoux. Seventy-eight Northwest Missouri and Northeast Kansas physicians and dentists attended the dinner and program. Presiding jointly at the meeting were the presidents of the two organizations, John R. McDaniel, M.D. and George T. Hopkins, D.D.S.

A dinner meeting of the Ozarks Medical Society and the members' wives was held at Crowe's Dinner House in Cassville on April 9. Local arrangements for the evening were made by Dr. Mary Newman of Cassville.

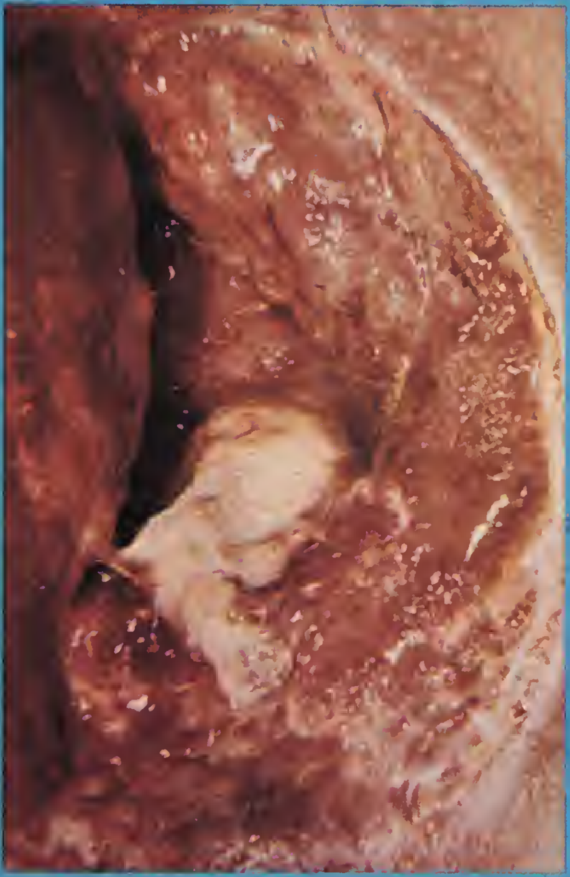
Decubitus Ulcers Yield to

Travase® Ointment

brand of **Sutilains**



Before treatment, necrotic matter coated the inner surfaces of this decubitus ulcer.



After six days of TRAVASE therapy, debridement is nearly complete and granulation evident.

tive Therapy—Observe Its Effects in 48 hours
he recommended nursing technique is
d without deviation, this procedure can
te visible improvement within 48 hours of
ent. If no dissolution of slough occurs by then,
application is unlikely to be rewarding
k for break in procedure, usually due to use
nsing or antiseptic agents which impair the
eness of the enzyme in TRAVASE).

observation and photos by Kathleen Brough
M.D., Marion County Home, Indianapolis, Ind.

see next page for prescribing information

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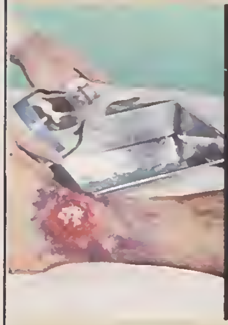
ravase® Ointment brand of Sutilains

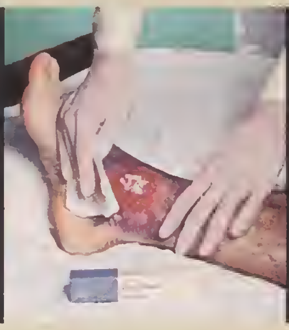
PPLICATION TECHNIQUE: TRAVASE Ointment is indicated as an adjunct o established methods of wound care for biochemical debridement. It lissolves and facilitates the removal of necrotic tissues and purulent xudates.

RAVASE enzymes are selective. Virtually inactive on viable tissue.

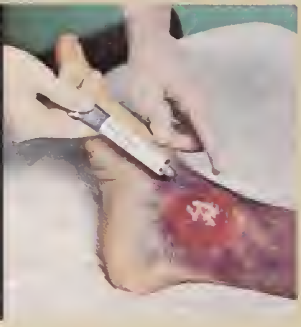
Vhen this recommended nursing technique is followed without deviation, his procedure can generate visible improvement within 48 hours . . .



cer being irrigated) oroughly cleanse and gate the wound area using y sterile water or sodium oride solution. Be sure to anse the wound of any iseptics or heavy-metal ibacterial agents which y interfere with the yme activity.

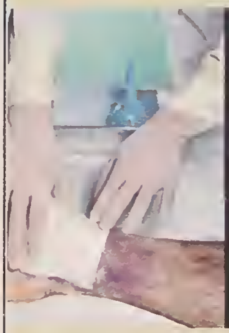


Thoroughly soak the wound area. Where practical, tubbing or showering is suitable. Or wet soaks with gauze pads may be used. Remember to avoid chemical cleansing agents which may interfere with the therapy.

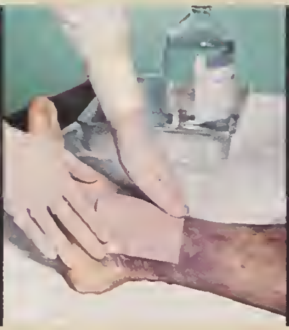


With a sterile cotton swab or finger cot, apply a very **thin** layer of TRAVASE Ointment. The ointment spreads easily and only a small amount is needed (a small dab of ointment will cover an area as big as the back of a hand).

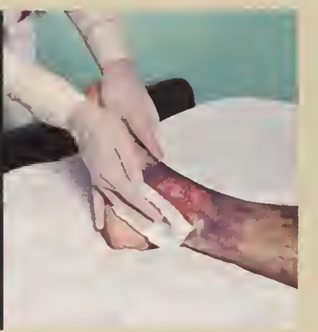
Be sure, though, to rub the ointment well into every crack or crevice of the wound and overlap the surrounding skin one-fourth to one-half inch beyond the area to be debrided—to be sure of complete coverage.



ply loose, wet dressings, oroughly soaked in sodium loride solution or sterile iter to the area to be brided only.



Cover the moist dressings with an occlusive wrap (Saran wrap, Telfa Pads, or other plastic wrappings) to keep wound site moist. Do not extend occlusive wrap over ½ inch beyond area to be debrided.



When changing dressing, gently wipe away the dissolved material. Repeat the complete dressing procedure, including application of TRAVASE Ointment, four times daily.

ie ulcer shown in these photos is simulated on a model in order to demonstrate e correct TRAVASE application technique.

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Division of Travenol Laboratories, Inc.
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Deerfield, Illinois 60015

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Institution ______________________________

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Please send:

______Additional Information on TRAVASE® Ointment (brand of Sutilains)

______In-service training program

______Comment ______________________________

DESCRIPTION: TRAVASE® (brand of sutilains) Ointment is a preparation of proteolytic enzymes, elaborated by **Bacillus sut** hydrophobic ointment base consisting of 95% white petrolatu polyethylene. One gram of ointment contains approximately 8 units* of proteolytic activity.

ACTION: TRAVASE Ointment selectively digests necrotic soft proteolytic action. It dissolves and facilitates the removal of n tissues and purulent exudates that otherwise impair formation granulation tissue and delay wound healing (4).

At body temperatures these proteolytic enzymes have optimal the pH range from 6.0 to 6.8.

INDICATIONS: For wound debridement (1,2)—TRAVASE Ointn indicated as an adjunct to established methods of wound care biochemical debridement of the following lesions:

Second and third degree burns,
Decubitus ulcers,
Incisional, traumatic, and pyogenic wounds,
Ulcers secondary to peripheral vascular disease.

CONTRAINDICATIONS: Application of TRAVASE (brand of sut Ointment is contraindicated in the following conditions:

Wounds communicating with major body cavities,

Wounds containing exposed major nerves or nervous tiss

Fungating neoplastic ulcers,

Wounds in women of child-bearing potential—because of laboratory evidence of effects of TRAVASE upon the deve

WARNING: Do not permit TRAVASE Ointment to come into cc the eyes. In treatment of burns or lesions about the head or the ointment inadvertently come into contact with the eyes, th be immediately rinsed with copious amounts of water, prefera

PRECAUTIONS: A moist environment is essential to optimal a enzyme. Enzyme activity may also be impaired by certain age several detergents and antiseptics (benzalkonium chloride, hexachlorophene, iodine, and nitrofurazone) may render the s indifferent to the action of the enzyme (3). Compounds such containing metallic ions interfere directly with enzyme activit slight degree, whereas neomycin, sulfamylon-streptomycin, ar do not affect enzyme activity. In cases where adjunctive topic has been used and no dissolution of slough occurs after treat TRAVASE Ointment for 24 to 48 hours, further application, be interference by the adjunctive agents, is unlikely to be rewar

In cases where there is existent or threatening invasive infect appropriate systemic antibiotic therapy should be instituted c

Although there have been no reports of systemic allergic rea humans, studies have shown that there may be an antibody r humans to absorbed enzyme material.

ADVERSE REACTIONS: Adverse reactions consist of mild, tra paresthesias, bleeding and transient dermatitis. Pain usually controlled by administration of mild analgesics. Side effects enough to warrant discontinuation of therapy occasionally ha

If bleeding or dermatitis occurs as a result of the application (brand of sutilains) Ointment, therapy should be discontinued toxicity has been observed as a result of the topical applicati TRAVASE Ointment.

Dosage and Administration

STRICT ADHERENCE TO THE FOLLOWING IS REQUIRED FC RESULTS OF TREATMENT

1. Thoroughly Cleanse and Irrigate Wound Area with so or water solutions. Wound **MUST** be cleansed of anti heavy-metal antibacterials which may denature enzy substrate characteristics (e.g., Hexachlorophene, Sil Benzalkonium Chloride, Nitrofurazone, etc.).
2. Thoroughly moisten wound area either through tubbi or wet soaks (e.g., sodium chloride or water solution
3. Apply TRAVASE Ointment in a thin layer assuring int with necrotic tissue and complete wound coverage e ¼ to ½ inch beyond the area to be debrided.
4. Apply loose wet dressings.
5. Repeat entire procedure 3 to 4 times per day for bes

How Supplied

3P3002 TRAVASE Ointment is supplied sterile in one-half (14.2 g.) containing 82,000 casein units of sutilains hydrophobic ointment base.

The ointment must be stored under refrigeration at 2° to 10° (35° to 50° F).

References

1. Garrett, T. A. **Bacillus subtilis** protease, a new agent for d Clin. Med. **76:** 11-15, 1969.

2. Hesterberg, R. (Necrosis treatment on fermentative basis). dissertation from the Chirurgical Clinic of the University of Dissertation Printing: Charlotte Schoen, Munich, 1964. (Ger.)

3. Howes, E. L. The healing of the burn may be hindered by therapy. 20th Cong. Soc. Inter. Chir., Rome, Italy, September

4. Prytz, B., Connell, J. F., Jr., and Rousselot, L. M. **Bacillus** protease in the digestion of burn eschar. Clin. Pharmacol. T 347-51, 1966.

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*A casein unit is the amount of enzyme required to produce optical density at 275 $m\mu$ as that of a solution of 1.5 mcg. after the enzyme has been incubated with 35 mg. of casein one minute.

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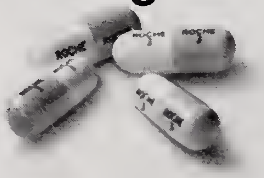

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Missouri Medicine

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JULY, 1973

VOLUME 70, NUMBER 7

Special Report:

ACTIONS and EVENTS

of the

Missouri State Medical Association

115th

ANNUAL SESSION

See Contents on Page 393

116th MSMA Annual Session
April 4-7, 1974 Kansas City

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115th Annual Session
Missouri State Medical Association

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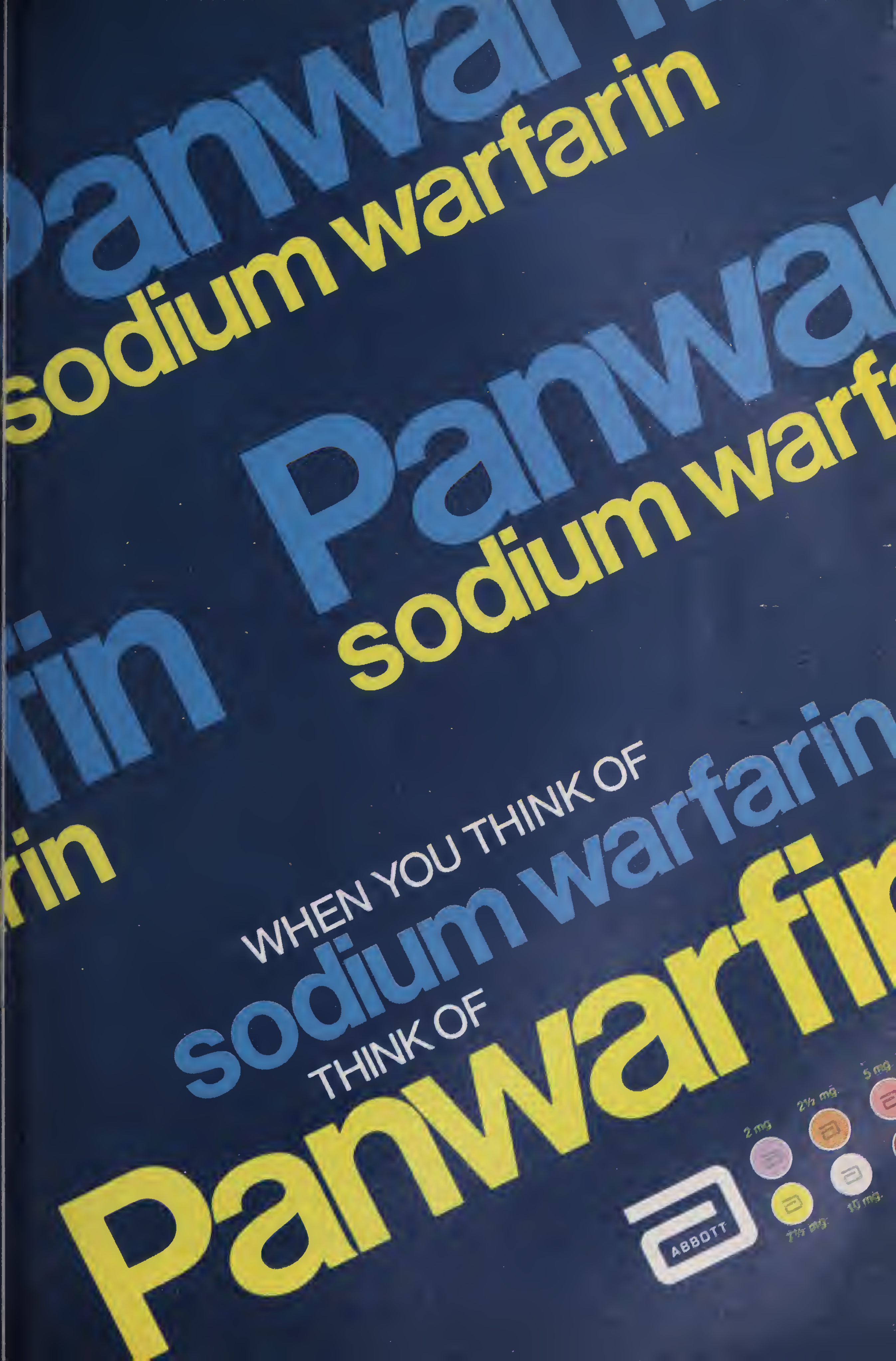
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Volume 70, Number 7—July, 1973

Missouri Medicine

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"*. . . I have been impressed by the number of physicians who are involved, who want to become involved or who want to know how to become involved.*"

Remarks of
Walter T. Gunn, M.D., President

Walter T. Gunn, M.D.

Mr. Speaker, Officers, Members of the House of Delegates and Friends:

I closed my talk before this House last year with the challenge, "Get Involved." That challenge, I believe, remains valid. Involvement is the life blood of an Association and without it we have nothing.

I might add, however, that while traveling around the state to county and district meetings and attending several national meetings during the past year, I have been impressed by the number of physicians who *are* involved, who *want* to become involved or who want to know *how* to become involved. Not all, due to individual circumstances, can serve the Association and the profession in the same way, but very, very few are not concerned or not interested in the problems which we face as physicians.

Don't let this deceive you into thinking that since there is concern and interest, we are all pulling in the same direction. It is obvious we are not. This, of course, is not a problem unique to medicine; all organizations and associations experience it.

Why, then, should we physicians strive to accomplish a task that few other groups can do? There are two basic reasons—Washington and Jefferson City! Legislation which would affect our profession seems to crop up in a disproportionate share in our capitols. And, while the pressure on our profession mounts, what do we see but more and more splinter groups emerge that siphon off needed strength while, at the same time, not offering better solutions to the problems.

Your county, state and national medical associations are not perfect, but they are the best and most effective tools we have today. By working constructively from within these already viable organizations, we provide strength *now* when it is most vitally needed.

It has been a great privilege for me to make new and renew old acquaintances with physicians during my term as President. I also feel that we can point to improvements in our State

Association which will benefit all MSMA members for years to come. These forward steps are not attributable to me, but rather to you as Members of the House, your Officers and Councilors and the Membership-at-Large.

I would like to express my sincere thanks to the committee members and individual physicians who have sacrificed time and effort for our Association during the past year. Someone must be responsible for getting the work done, and these physicians never hesitate to do the job.

I think we have seen an improvement in our dealings with our lawmakers in Washington and in the Missouri General Assembly. We don't always "get our way," but we are heard. This is a task in which all MSMA members must become better informed and more active. Let's face it. Your vote, your time and, yes, your contributions mean much to your elected representatives. MMPAC, of course, provides us with a much needed outlet. I, personally, hope that each of you, if you are not already a member, will join MMPAC and AMPAC and urge your colleagues to do so. Also, each of us should take the time to become personally acquainted with our legislators.

The MSMA Headquarters Building, which this body provided for last year, is definitely going to be a plus for our Association. Our new home, which should be ready for occupancy within a month, is located across the street from the Governor's Mansion and two blocks from the State Capitol Building. This is the *Headquarters of all MSMA members.* You and the members in your area are encouraged to stop by to discuss matters of importance or merely become better acquainted with the staff and its work.

Also in the past year, your State Association has worked with the State Department of Education, State Division of Health, Missouri Parent-Teacher's Association and Osteopathic Association to develop first a venereal disease curriculum and, in the future, a comprehensive health education curriculum for Missouri's schools.

We also have worked with the Division of Health on an ongoing project to determine health manpower needs in the state, have cosponsored timely conferences with the JCAH and the Large and Small Hospital organization and have attended and had input into many, many meetings dealing with health-related subjects.

Another high note this past year, to which we can all point with pride, has been the Missouri State Medical Foundation's record-setting $70,000 in loans to 119 medical students in the state.

These activities, of course, represent only a fraction of the day-to-day routine carried out by your State Association. The Association can offer more or different services, and component societies and individual members are invited and urged to provide suggestions and participation.

To return to my original thought, I believe the most important ingredient for the success of your State Association is *involvement.* I feel that the Association is doing a fine job now. But, it can do even more if all of us here today and all those members who we represent will become more involved in organized medicine at all levels.

"Let Unity be the watchword of the future."

E. A. Stricker, M.D.

Remarks of
E. A. Stricker, M.D., President-Elect

Mr. Speaker, Officers, Members of the House of Delegates and Guests:

It will not be an easy task to follow my good friend and predecessor, Walter Gunn. He has been an energetic and dynamic figure in Missouri medicine this past year. He is to be commended for the leadership he has given us, and I hope to call on him during the ensuing year for his advice and counsel.

I have been on the Council since 1960 and have found the Officers and Councilors to be a conscientious and dedicated group, who work long hours in your behalf. I have no qualms about the future of our society when we have men of this caliber steering the operation of our Association. With a team so dedicated to the principles of our profession, we should be able to resolve any problems which we may encounter in the year ahead.

Let Unity be the watchword of the future.

Because problems we still do have. We are living in a fast-moving, restless society. Medicine is still under fire from all angles. There are cries of increased health care costs, lack of doctors in ghetto and rural areas, health care crises of all kinds. We are constantly confronted with new proposals which may affect the practice of medicine and our way of life. Two pressing problems are the PSRO law, with its requirements for continued medical education and peer review, and the new bills for national health insurance and health maintenance organizations (HMOs). Other immediate problems are unfair price curbs on medicine, venereal disease, abortion legality, physicians' unions or guilds, acupuncture and the clamor for more representation by youth, women and minorities.

Despite the fact that a strong and unified effort is so important in coping with these problems, there is a declining ratio of members in our state and national organizations to the total physician population. We can improve upon this, just as we are making progress in other areas. Our rapport with the news media is much improved. Through AMPAC and MMPAC, we now have good communication with legislators at state and national levels.

We can continue to progress, but only if we work together and understand each other. You as delegates are all aware of this or you would not be here. It takes a lot of time and brain power, and you are giving it to make your state medical organization function as a unit. It takes a lot of sharing of ideas and opinions, and I'm sure we will all be plenty vocal.

Well, that's good. Let's be vocal in ways that will do some good. Let's not just "cuss"; let's discuss. In order to coordinate our efforts, we must be able to communicate more effectively to the public and within our profession. Let's talk to our colleagues at home and tell them what we are doing. Get them to support MSMA and AMA and strengthen the voice we can and must have in proposed medical programs.

Welcome to those of you who are delegates for the first time. You may be here because you like what we're doing and want to help. You may be here because you dislike some MSMA policies and want to change. Either way—good for you! You're working and are working within the system. We're glad to have your input.

Bring us names of new and young members of your local medical society for committees. We can use their ideas, their energy and their

(Continued on page 399)

Mrs. Keith D. Jones

"Our greatest emphasis this year has been to make women more knowledgeable in the fields of legislation, public affairs and politics."

Report of

Mrs. Keith D. Jones

President of the Woman's Auxiliary

Mr. Speaker, Mr. President, Members of the House of Delegates and Guests:

It is with great pleasure that I bring a report of the Woman's Auxiliary. Our women have accepted the responsibility of viewing their problems within their community and, with initiative, they have worked to solve them. One of my greatest privileges in this office is the opportunity to visit our county and district auxiliary meetings. I was quite impressed to see that our women were on the job working to improve health education within the community.

We cosponsored with the MSMA Council the first statewide health education day on October 25. This was held in conjunction with our Annual Fall Conference. More than 70 state organizations were invited to participate at this meeting. Our program was selected by the Woman's Auxiliary to the AMA as a pilot for the other 49 states. Our goal was to assess the community needs and see how we could help. Our counties have been selective. They have exemplified those qualities of independent thought and individual commitment which are so necessary to move the Auxiliary to a point where it is a vital force for community health and a real helping hand to the physician. We have assisted in the 19 PTA workshops on drugs, venereal disease and sex education. Projects assumed under Health Education, in which notable work has been done to make voluntarism in Missouri highly successful, are in the areas of immunizations, blood donor recruitment, mental health, safety, drug abuse, alcohol campaigns, home care programs, meals-on-wheels and all forms of environmental help.

American Medical Association-Education Research Foundation contributions have increased from $3,000 last year to more than $11,000. Your direct contributions are being credited to the Auxiliary, making us the 22nd state with this joint effort.

You have been so kind to us this year, and at this time, we would like to present to you this check from the Auxiliary for the Missouri State Medical Foundation in honor of Doctor's Day, March 30. We are pleased to have increased this amount from $300 last year to a total of nearly $2,500 at this time. We held our first benefit dinner for the Foundation on October 24 at a joint meeting with the Fifth District Councilor meeting.

Our greatest emphasis this year has been to make our women more knowledgeable in the fields of legislation, public affairs and politics. After representing the Auxiliary the past two years at the American Medical Political Action Committee Workshop in Washington, I, personally, realized that we in Missouri needed to become more involved. To give a few highlights, we created a Public Affairs and PAC chairmanship, and we sold more than 100 women PAC memberships, a 1,000% increase. Today, I would like to impress upon you that if you have not joined AMPAC and MMPAC, a family membership is only $40. Organized medicine needs all the friends we can secure, and with these funds, we can help to elect friends of medicine.

We had our first Ladies Day at the Legislature and our second is planned for April 11. We featured legislation at our Fall Conference, where both gubernatorial candidates addressed us. We also plan to have our first Champagne Public Affairs Breakfast tomorrow at the Starlight Roof at 7:45 a.m. Dr. James Sammons, Vice-Chairman of the AMA Board of Trustees, will speak on the "Here and Now of Politics." Come be our guests, but do sign a list at the registration desk. We are working through a Legislative Effort Group System to help notify legislators. We have 26 women who, with a telephone call, will contact another ten and suddenly we have a force of 260 or 2,600 to write letters or make telephone calls when needed.

To inform you of all the projects which have been accomplished by our women this year would make this report much too lengthy, so I have only touched upon a few of the outstanding ones.

We sincerely want to thank you for your support and guidance. We appreciated being included at the Council meetings and having the opportunity to make a report to the Council of our activities. We feel that we have certainly bridged the communications gap this year.

The thing that stands out predominantly in all my observations is that Missouri doctors' wives were outstanding women and hard working women, but basically wives, mothers and homemakers who take time and effort to make their own home towns better places in which to live for all the people. Because of their concern, as expressed by their good works, the image of Missouri physicians undoubtedly has taken on a higher luster. We cannot foresee what brilliant achievements may be attained by this Auxiliary in the name of the physicians of Missouri.

Remarks of President-Elect

(Continued from page 397)

enthusiasm. Let's welcome participation by interns and residents, too. They have much to contribute and they may find that our "Establishment" does function and can speak as one strong voice.

Encourage your wives to join the state Auxiliary, so that their voices can be heard, also. The Auxiliary is very active in Missouri and is helping MSMA in many ways.

Fortunately, we have an extremely capable and interested staff at both the state and national level to keep us alerted to new bills, to act as liaison with our legislators and with the news media and to carry out the thousand and one details of our decisions.

But, it is up to this group of delegates to make those decisions, to agree on progressive action that will reestablish doctors as leaders of the fight for quality medical care for their patients.

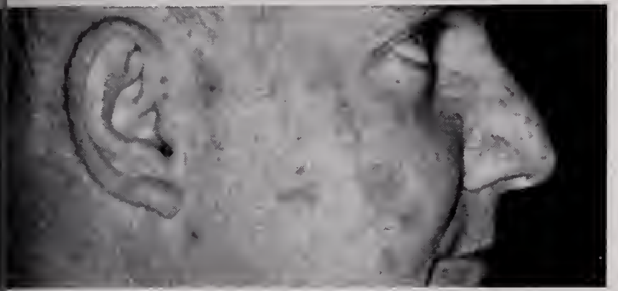
What's on your patient's face...

may be more important than
his chief complaint

he lesions on his face may
solar/actinic – so-called
nile" keratoses...and
ey may be premalignant.

lar, actinic or senile keratoses

ese lesions may be called by several names, but they
ally can be identified by the following character-
cs: the typical lesion is flat or slightly elevated, of a
wnish or reddish color, papular, dry, rough, adherent,
sharply defined. They commonly occur as multiple
ons, chiefly on the exposed portions of the skin.



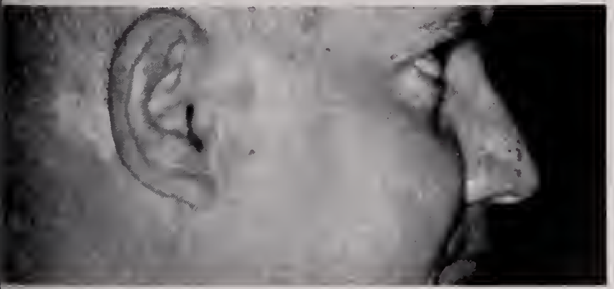
ient P.T. seen on 3/29/67 shows typical lesions of*
derately severe keratoses. Note residual scarring on
ge of nose from previous cryosurgical and electro-
gical procedures.

quence of therapy/
lectivity of response

er several days of therapy with Efudex® (fluorouracil),
thema may begin to appear in the area of the lesions;
reaction usually reaches its height of unsightliness
d discomfort within two weeks, declining after dis-
tinuation of therapy. This reaction occurs in affected
as. Since the response is so predictable, lesions that
not respond should be biopsied.

cceptable results

atment with Efudex provides highly favorable cos-
tic results. Incidence of scarring is low. This is
ticularly important with multiple facial lesions.
udex should be applied with care near the eyes, nose
d mouth.



tient P.T. seen on 6/12/67, seven weeks after discon-*
uation of 5%-FU cream. Reaction has subsided.
sidual scarring not seen except for that due to prior
rgery. Inflammation has cleared and face is clear of
ratotic lesions.

ta on file, Hoffmann-La Roche Inc., Nutley, N.J.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local – pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported – insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers – containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.
Cream, 25-Gm tubes – containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

This patient's lesions were resolved with

Efudex®
(fluorouracil)

5% cream/solution
...a Roche exclusive

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Must vasodilators and therapy for other diseases come into conflict?

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the compatible vasodilator… no treatment conflicts reported

The cerebral or peripheral vascular disease patient often has coexisting disease[1] which calls for another drug along with his vasodilator. It may be a hypoglycemic, miotic, antihypertensive, diuretic, anticoagulant, corticosteroid, or coronary vasodilator.

Vasodilan is not incompatible with any of these drugs—no treatment conflict has been reported. And, unlike other vasodilators, Vasodilan has not been reported to affect carbohydrate metabolism, liver function, or intraocular pressure—or to complicate treatment of diabetes, hypertension, peptic ulcer, glaucoma, or liver disease.

In fact, there are no known contraindications to the use of Vasodilan in recommended oral doses, other than that it should not be given in the presence of frank arterial bleeding or immediately postpartum.

Indications: Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease
3. Threatened abortion.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.

Dosage and Administration: 10 to 20 mg. three or four times daily.

Contraindications and Cautions: There are no known contraindications t oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Adverse Reactions: On rare occasions, oral administration of the drug h been associated in time with the occurrence of severe rash. When rash appears, the drug should be discontinued. Occasional overdosage effect such as transient palpitation or dizziness are usually controlled by reducing the dose.

Supplied: Tablets, 10 mg.—bottles of 100, 1000, 5000 and Unit Dose; 20 mg.—bottles of 100, 500 and Unit Dose.

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MeadJohnson LABORATORIES

1. Gertler, M. M., et al.: Geriatrics *25*:134-148 (May) 1970.

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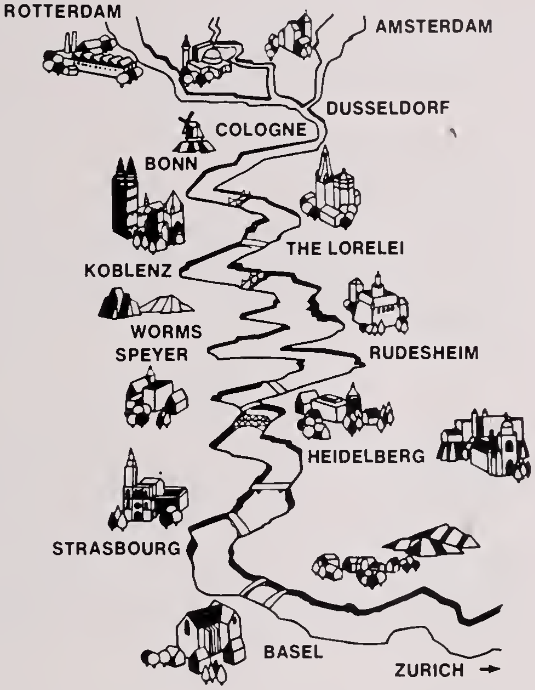

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Minutes of the
115th Annual Session
MISSOURI STATE MEDICAL ASSOCIATION
House of Delegates
Chase-Park Plaza Hotel, St. Louis
March 29-April 1, 1973

FIRST SESSION

The First Session of the House was called to order at 1:30 PM on March 29, 1973 in the Khorassan Room with E. D. Imes, Speaker, presiding. The following officers, councilors and delegates were present during the 115th Annual session:

Officers

President	Walter T. Gunn, St. Louis
President-Elect	E. A. Stricker, St. James
Vice-President	Paul F. Max, St. Louis
Vice-President	C. A. McBurney, Slater
Vice-President	Truman B. Schertz, N. Kansas City
Secretary	John I. Matthews, Jefferson City
Treasurer	Charles R. Gulick, St. Louis
Speaker of the House	E. D. Imes, Maryville
Vice-Speaker of the House	R. A. Slickman, Kansas City
Immediate Past-President	Gerald L. Miller, Kansas City

Councilors

1st District	John N. Martin, St. Joseph
2nd District	Lysle M. Bach, Hannibal
3rd District	Max S. Franklin, St. Louis
4th District	Louis P. Hetlage, Troy
5th District	James C. Cope, Columbia
6th District	William D. Bradshaw, Clinton
7th District	R. Allen Chandler, Kansas City
8th District	Howard J. McAlhany, Springfield
9th District	Claude W. Cooper, Thayer
10th District	Eugene T. Hansbrough, Poplar Bluff

DELEGATES
First District

Andrew	Warren C. Baker, Savannah
Buchanan	William B. Rost, St. Joseph
Buchanan	E. E. Wadlow, St. Joseph
Clay	Richard P. Bowles, Liberty
Clay	Chris K. Fotopoulos, N. Kansas City
Clay	Donald E. Kuenzi, Kansas City
Clinton	L. A. Ozenberger, Plattsburg
Grand River	E. W. Allen, Carrollton
Grand River	Albert Cross, Trenton
Grand River	Robert Smith, Brookfield
Northwest	E. D. Imes, Maryville
Northwest	Frank B. Matteson, Grant City
Northwest	G. Raymond Wempe, Maryville

Second District

Chariton-Macon-Monroe-Randolph	J. E. Campbell, Macon
Chariton-Macon-Monroe-Randolph	F. A. Barnett, Paris
Chariton-Macon-Monroe-Randolph	C. C. Cohrs, Moberly
Chariton-Macon-Monroe-Randolph	F. L. Harms, Salisbury
Lewis-Clark-Scotland	Landis Y. Davis, Canton
Marion-Ralls-Shelby	Phillip B. Foreman, Hannibal
Marion-Ralls-Shelby	Edward M. Plowman, Hanniba
Pike	Charles H. Lewellen, Louisiana

Third District

St. Louis City	William E. Allen, St. Louis
St. Louis City	Walter Ballinger, St. Louis
St. Louis City	George Bohigian, St. Louis
St. Louis City	R. V. Bradley, St. Louis
St. Louis City	George Brennan, St. Louis
St. Louis City	R. D. Brookes, St. Louis
St. Louis City	Kenneth Bruns, St. Louis
St. Louis City	T. J. Cooper, St. Louis
St. Louis City	Robert K. Dorton, St. Louis
St. Louis City	Richard K. Danis, St. Louis
St. Louis City	Joseph C. Edwards, St. Louis
St. Louis City	Richard H. Fallon, St. Louis
St. Louis City	Robert H. Felix, St. Louis
St. Louis City	Paul L. Friedman, St. Louis
St. Louis City	August W. Geise, Jr., St. Louis
St. Louis City	George L. Hawkins, Jr., St. Louis
St. Louis City	James W. Haynes, St. Louis
St. Louis City	James N. Heins, St. Louis
St. Louis City	Ronald Hoffmann, St. Louis
St. Louis City	Patrick C. Hogan, St. Louis
St. Louis City	Charles Jost, St. Loui
St. Louis City	Donald R. Judd, St. Louis
St. Louis City	Robert W. Kelley, St. Louis
St. Louis City	Charles Kromer, St. Loui
St. Louis City	Lawrence M. Lawton, St. Loui
St. Louis City	J. E. Lewis, Jr., St. Loui
St. Louis City	Francis X. Lieb, St. Loui

St. Louis City	P. S. Luedde, St. Louis
St. Louis City	R. B. McCloskey, St. Louis
St. Louis City	Allan H. McCown, St. Louis
St. Louis City	R. Reilly Maginn, St. Louis
St. Louis City	Paul F. Max, St. Louis
St. Louis City	Arthur W. Neilson, St. Louis
St. Louis City	Lawrence W. O'Neal, St. Louis
St. Louis City	F. Eugene Pennington, St. Louis
St. Louis City	H. A. Reich, St. Louis
St. Louis City	Hubert A. Ritter, St. Louis
St. Louis City	Herman Russell, St. Louis
St. Louis City	P. B. Salanga, St. Louis
St. Louis City	C. S. Sherwin, St. Louis
St. Louis City	Joseph A. Swope, St. Louis
St. Louis City	C. M. Turner, St. Louis
St. Louis City	Joseph B. Vacca, St. Louis
St. Louis City	Carol F. Williams, St. Louis
St. Louis City	R. Dean Wochner, St. Louis

Fourth District

Franklin-Gasconade-Warren	W. R. Richardson, Union
Franklin-Gasconade-Warren	George Workman, Herman
Jefferson	Vicente D. Deles, Crystal City
St. Charles-Lincoln	Edward O. Damron, Elsberry
St. Charles-Lincoln	Paul H. Rother, St. Charles
St. Charles-Lincoln	John C. Soucy, Jr., St. Charles
St. Louis County	Vernon H. Balster, St. Louis
St. Louis County	C. Read Boles, St. Louis
St. Louis County	Robert B. Deitchman, St. Louis
St. Louis County	Jack R. Eidelman, St. Louis
St. Louis County	Barney W. Finkel, St. Louis
St. Louis County	Allen P. Klippel, St. Louis
St. Louis County	Jules H. Kopp, St. Louis
St. Louis County	John M. Laird, St. Louis
St. Louis County	Robert A. Mayer, St. Louis
St. Louis County	Jerry N. Middleton, St. Louis
St. Louis County	Frederick D. Peterson, St. Louis
St. Louis County	Rudy Ruhling, St. Louis
St. Louis County	Melvin Schwartz, St. Louis
St. Louis County	James C. Sisk, St. Louis
St. Louis County	Miles C. Whitener, St. Louis

Fifth District

Audrain	Ben N. Jolly, Mexico
Boone	Kenneth K. Keown, Columbia
Boone	John T. Logue, Columbia
Boone	Benedict A. Moranville, Columbia
Boone	Reginald P. Pugh, Columbia
Boone	William B. See, Columbia
Boone	Hugh E. Stephenson, Columbia
Callaway	Vernon B. Jackson, Fulton
Cole	Robert Bregant, Jefferson City
Cole	Thomas J. Ryan, Jefferson City
Cole	Robert H. Tanner, Jefferson City
Cooper	George W. Winn, Boonville
Montgomery	S. J. Byland, Wellsville
Morgan	Ruth Kauffman, Versailles

Sixth District

Henry	James O. Smith, Clinton
Johnson	Charles M. Lederer, Warrensburg
Lafayette-Ray	William C. Lahue, Lexington
Lafayette-Ray	Charles T. Riley, Richmond
Pettis	A. J. Campbell, Sedalia
Saline	C. A. McBurney, Slater
West Central	Donald H. Giesler, Osceola
West Central	R. John Torontow, Nevada

Seventh District

Jackson	Francis J. Ammatelli, Kansas City
Jackson	Pat A. Barelli, Kansas City
Jackson	Lafe Bauer, Kansas City
Jackson	T. J. Bryant, Kansas City
Jackson	Martin L. Crow, Kansas City
Jackson	Robert C. Fairchild, Shawnee Mission, Kan.
Jackson	Fred D. Fowler, Kansas City
Jackson	John A. Griffith, Jr., Kansas City
Jackson	Edward E. Haith, Kansas City
Jackson	William D. Hoadley, Kansas City
Jackson	Burnell Landers, Kansas City
Jackson	Vance E. Link, Independence
Jackson	R. Stacy Long, Kansas City
Jackson	George J. Lytton, Kansas City
Jackson	Edwin E. MacGee, Kansas City
Jackson	Andrew McCanse, Kansas City
Jackson	Clyde V. Martin, Kansas City
Jackson	Richardson K. Noback, Kansas City
Jackson	Milton B. Ozar, Kansas City
Jackson	Carl M. Peterson, Kansas City
Jackson	Larry G. Piepergerdes, Kansas City
Jackson	Gordon C. Sauer, Kansas City
Jackson	Robert A. Slickman, Kansas City
Jackson	O. Dale Smith, Prairie Village, Kan.
Jackson	W. Jack Stelmach, Kansas City
Jackson	C. Y. Thomas, Jr., Kansas City
Jackson	Ronald A. Youmans, Kansas City

Eighth District

Greene	MacDonald Bonebrake, Springfield
Greene	James T. Brown, Springfield
Greene	Walter A. German, Springfield
Greene	Noel R. Lewis, Springfield
Greene	Stanley S. Peterson, Springfield
Greene	Guido Podrecca, Springfield
Greene	Thomas Sweeney, Springfield
Greene	William M. Walker, Springfield
Jasper	John R. Esther, Joplin
Jasper	F. Wendell Pence, Carthage
Jasper	Marvin Singleton, Joplin
Ozarks	Richard J. Betz, Neosho
Ozarks	C. S. Christianson, Mt. Vernon
Ozarks	James W. Crain, Branson
Ozarks	F. R. Esparrago, Monett
Ozarks	Kenneth Glover, Mt. Vernon
Ozarks	R. E. Kenney, Neosho
Ozarks	S. D. Roper, Ozark
Webster	T. M. Macdonnell, Marshfield

Ninth District

Mid-Missouri	B. J. Bass, Salem
Mid-Missouri	Frank A. Elders, Jr., Cuba
Mid-Missouri	Rae W. Froelich, Lebanon
Mid-Missouri	J. M. Myers, Rolla
Mid-Missouri	Barbara Russell, Rolla
South Central	James Hasek, Mountain Grove
South Central	J. N. Wiles, West Plains
South Central	C. F. Smith, Willow Springs

Tenth District

Butler-Wayne-Ripley	George H. Ladyman, Poplar Bluff
Butler-Wayne-Ripley	T. Eugene Ruff, Poplar Bluff
Butler-Wayne-Ripley	Ben Till, Poplar Bluff
Cape Girardeau	Edwin K. Burford, Cape Girardeau
Cape Girardeau	Melvin C. Kasten, Cape Girardeau

Cape Girardeau	Harold B. Rapp, Cape Girardeau
Dunklin	George Q. Dunmire, Kennett
Mineral Area	Charles W. Chastain, Farmington
Mineral Area	Robert F. Dettmer, Ironton
Mineral Area	Norma Farmer, Farmington
Mineral Area	Stanton L. Hardy, Desloge
Mineral Area	Kirby L. Turner, Potosi
Perry-St. Genevieve	Job B. Pontillas, Perryville
SEMO	Robert C. Ahlvin, Sikeston
SEMO	Max A. Heeb, Sikeston

PAST-PRESIDENTS—DELEGATES-AT-LARGE

W. A. Bloom, Fayette
Donald M. Dowell, Chillicothe
Paul R. Whitener, St. Louis
Gerald L. Miller, Kansas City
Joseph L. Fisher, St. Joseph
Victor Buhler, Kansas City
Hector W. Benoit, Jr., Kansas City
David N. Kerr, St. Louis
Byron M. Stuart, Boonville
Kenneth Hollweg, Kansas City
Guy N. Magness, University City

STUDENT DELEGATES

Ms. Pat Hubbell, University of Missouri-Kansas City School of Medicine
Mr. Merlin Brown, University of Missouri-Kansas City School of Medicine
Mr. James Barton, Washington University School of Medicine
Mr. Barry Farber, Washington University School of Medicine
Mr. Ira M. Rutkow, St. Louis University School of Medicine
Mr. John P. Jones, St. Louis University School of Medicine
Mr. Orlyn Lockard, University of Missouri-Columbia School of Medicine
Mr. John Brandt, University of Missouri-Columbia School of Medicine

The invocation was given by Association President Walter T. Gunn.

Dr. F. Eugene Pennington, Chairman of the Credentials Committee, reported that satisfactory credentials thad been presented by nine officers, ten councilors and 125 delegates. He informed the House that this number of delegates constitutes a quorum and dispensed with a roll call.

Dr. Max Franklin, Chairman of the Committee on Arrangements, welcomed the Association members, their wives and guests to the 115th Annual Session and expressed the hope for a successful meeting.

The Speaker then introduced Dr. James Sammons, Vice-Chairman of the AMA Board of Trustees and a distinguished guest at the Annual Session.

The minutes of the 114th (1972) Annual Session, which were published in the July 1, 1972 issue of MISSOURI MEDICINE, were approved as published.

The Speaker announced appointment of the following reference committees and presented his instructions to the committees:

ON AMENDMENTS TO THE CONSTITUTION AND BYLAWS

Robert H. Felix, St. Louis, Chairman
William R. Richardson, Union
Roy E. Kenney, Neosho
Robert F. Dettmer, Ironton
F. A. Barnett, Paris

ON RESOLUTIONS

Robert A. Mayer, St. Louis County, Chairman
Jack N. Wiles, West Plains
R. John Torontow, Nevada
F. Eugene Pennington, St. Louis
T. J. Bryant, Kansas City

ON REPORTS OF OFFICERS

MacDonald Bonebrake, Springfield, Chairman
Carol F. Williams, St. Louis
Richard P. Bowles, Liberty
Robert H. Tanner, Jefferson City
Ronald A. Youmans, Kansas City

ON MISCELLANEOUS AFFAIRS

E. Warren Allen, Carrollton, Chairman
Joseph B. Vacca, St. Louis
John C. Soucy, St. Charles
O. Dale Smith, Prairie Village, Kan.
Thomas M. Macdonnell, Marshfield

ON MEDICAL EDUCATION AND PUBLIC WELFARE

Andrew McCanse, Kansas City, Chairman
Benedict A. Moranville, Columbia
Edwin K. Burford, Jr., Cape Girardeau
E. J. Cunningham, Jr., St. Louis County
Richard V. Bradley, St. Louis

ON NECROLOGY

T. Eugene Ruff, Poplar Bluff, Chairman
Ruth Kauffman, Versailles
David N. Kerr, St. Louis
Gordon C. Sauer, Kansas City
E. E. Wadlow, St. Joseph

The Speaker introduced Dr. Gunn who delivered the annual President's Message.

(The President's Message is published on page 395.)

The Speaker then asked Dr. E. A. Stricker to present the annual message of the incoming President.

(Dr. Stricker's address is published on page 397.)

(Both Presidential messages were referred to the Reference Committee on Reports of Officers.)

The Speaker then invited Mrs. Keith D. Jones to present the annual report of the President of the Woman's Auxiliary.

(This report is published on page 398.)

(Mrs. Jones's report was referred to the Reference Committee on Reports of Officers.)

The Speaker stated that the reports of the Health Care Foundation of Missouri, Officers, Committees, Commissions and Council were published in the Delegates Handbook and referred the reports to the appropriate reference committees. He asked for any supplementary reports from committee and commission chairmen. There were no supplementary reports.

The Speaker then requested any supplementary report of the Council. He referred the various subjects within the Supplementary Report of the Council to appropriate reference committees.

Park Plaza
HOTEL

Dr. E. D. Imes, Speaker of the House of Delegates, declares the 115th Annual Session of the Missouri State Medical Association open as he calls the House to order on March 29, 1973. Seated *(left to right)* are MSMA President Walter T. Gunn, President-Elect E. A. Stricker and Vice-Speaker R. A. Slickman.

(This report is published on page 483.)

The reports of the Health Care Foundation of Missouri, Officers, Committees, Commissions and Council are as follows:

REPORT OF THE HEALTH CARE FOUNDATION OF MISSOURI

During the calendar year 1972 and the first two months of 1973, the Health Care Foundation of Missouri struggled with several major problems. This report will cover seven major areas of activity, which have led to some feeling of accomplishment and identification of future purpose of the Health Care Foundation, but with a distinct feeling that all problems have not been solved and that much more remains to be done.

In January, 1972, the Board of Directors clearly recognized that the initial seed monies, which had been basically the sole source of funding for the Health Care Foundation, would have to be supplemented substantially if, indeed, the Foundation was to grow and mature. A multilateral approach was attempted and met with varying degrees of success.

Various private foundations throughout the state were contacted, in particular, were Mr. Homer Wadsworth of Kansas City, President of the Kansas City Association of Trusts and Foundations, representing more than 25 private foundations; and Mr. Richard Dunlop of St. Louis, who represented more than 35 private foundations. Both of these gentlemen expressed much interest in the activities of the Health Care Foundation, but none were able to relate to the Foundation financially because of an inappropriate IRS tax designation. Negotiations were reopened with IRS in St. Louis to achieve a more favorable classification, and, as of the time of this report, the desired 501(c)(3) designation has still not been granted but appears to be within our grasp within the near future. This will make the Health Care Foundation a most appropriate depository for private giving, with complete release of the donor from any obligation to justify the financial support given.

The commercial health insurance industry through the Health Insurance Council was contacted, and a meeting was held in Kansas City on March 30 by representatives of the Health Care Foundation and representatives of HIC from both New York and Chicago. A great deal of optimism was expressed by the representatives of HIC that financial support on a pro rata basis from the larger companies doing a significant percentage of the health care insurance business in Missouri would be forthcoming. However, this meeting led to the establishment of a task force of their member companies, which task force was not even appointed until September, and the end result of all of these negotiations to date has been essentially zero. The HIC task force has been unable to develop a plan that would permit equitable funding from their standpoint, in spite of many reassurances which have been given verbally and in writing to the contrary.

The four Blue programs in the state of Missouri have been contacted both personally and in writing regarding continued support of the activities of the Health Care Foundation. As may be remembered, the two Blue Shield programs in Missouri were responsible for the major provision of seed money when the Health Care Foundation was first started in 1970. As the result of the recent contacts in 1972 to the four plans, Kansas City Blue Shield did make a second contribution, which was considered their appropriate fair share on the basis of premium dollars engendered in Missouri by the major carriers (Blues and otherwise). In spite of continuing negotiations with Blue Shield of St. Louis and the two Blue Cross pro-

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Denver, Colorado 80202 • (303) 893-9797

grams in the state, no further contributions have been forthcoming.

Early success has been met by initial discussions with several large management groups in western Missouri. To date we have had a very favorable response from all of them and negotiations are still continuing in an atmosphere of optimism. To support this optimism, two large companies have already given considerable financial support to the Foundation for a year's evaluation of our activities and the ability of the Health Care Foundation to help monitor quality of care as provided for employees of these corporations and to control costs, as this may become necessary.

The Missouri Regional Medical Programs have long expressed their interest in helping the Health Care Foundation, particularly as it relates to evaluation studies of the quality of care in Missouri, as to the identification of educational needs resulting from such evaluation, and for developing, through the University of Missouri, computerization of those portions of the program conducted by the Health Care Foundation which lend themselves to computer analysis. In June, 1972, the Health Care Foundation developed a program which has been ongoing since September and which has been funded on a monthly basis at the level of $2,000 a month, as pilot project reports have been prepared and reviewed. During these negotiations with Missouri Regional Medical Programs, the Health Care Foundation was encouraged to expand its proposals and to apply for a grant through Regional Medical Programs to become effective in August, 1973. Such a proposal has been drafted, reviewed and accepted with some modifications. The various advisory Comprehensive Health Planning agencies in the state have had to pass on this proposal, and very favorable responses have been forthcoming from them. The State Regional Advisory Council to Missouri Regional Medical Programs has approved a grant beginning in August 1973, pending approval of the National Regional Medical Programs Advisory Council and that of HEW. This was the source of continuing encouragement to the Health Care Foundation, until recent severe budgetary cut-backs recommended by President Nixon, which may very well delete any long-range future funding by any Regional Medical Program. As of the time of the preparation of this report, it appeared rather dubious that there would be any new grants funded by HEW through Regional Medical Programs, and this one aspect of our financial support very probably will not come to be.

Having had the support of the Missouri Association of Osteopathic Physicians and Surgeons ever since the founding of the Health Care Foundation to seek federal dollars for operational support, it was possible to gain similar support from the Council of Missouri State Medical Association to permit the Health Care Foundation to apply for an EMCRO grant. Meetings were held with representatives of HEW in Kansas City relative to the development of such a proposal. With considerable help from the staff of Missouri Regional Medical Programs, an appropriate draft for an EMCRO grant was submitted in early January of 1973. Funds for this grant are definitely available if the grant is approved, but final action by the National Review Committee on all such grants will not be rendered until probably late April or early May, 1973. If, indeed, the Health Care Foundation's grant is funded, money should be available for active utilization by the Health Care Foundation by July 1 1973.

In October, the Board of Directors, fully recognizing that funds were being strained to the maximum, decided that all Participating Members of the Health Care Foundation would be asked to make a voluntary contribution of $20 or more to help keep the Foundation alive and viable until the many other sources of funding became a reality. The result was that by the end of 1972, approximately $15,000 had been contributed by these member physicians on a voluntary basis, many of them contributing more than the requested $20, with some donations being as high as $100. The Radiological Society of Missouri contributed $500.

The financial resources of the Foundation still are not at anywhere near the level which will permit expansion of the activities of the Foundation to the desired level, because of inability to pay adequate salaries to sufficient people to expand these activities. However, the situation appears somewhat more optimistic at this point in time in view of what I have already said, and what will be said later on in this report.

A change in the Bylaws passed in early September of 1971, changing the membership of the Health Care Foundation from an automatic one to one of voluntary participation, necessitated a statewide membership drive which was begun late in 1971 and was not really fully mounted until January of 1972. As the result of this solicitation of physicians in the state of Missouri, regardless of their membership in the Missouri State Medical Association or the Missouri Association of Osteopathic Physicians and Surgeons, a total physician membership of 2,658 was achieved. This represents approximately 57% of the M.D.s and 64% of the D.O.s for an overall total membership in excess of 59% of the active practicing physicians who were solicited in the state of Missouri. It is planned that another membership drive will be undertaken in the spring of 1973 to expand this membership.

During 1972, the Central Coordinating Committee of the Health Care Foundation under the Chairmanship of Dr. Clem Grebel, working with the specialty societies throughout the state, developed its own procedural guidelines for use by hospitals, insurance carriers, physicians and others. By the end of 1972, an almost entirely complete set of such guidelines had been submitted, and Dr. Grebel and the Central Coordinating Committee have just recently completed preparing them for publication. As has been said before, these guidelines are, indeed, nothing but guidelines of proper diagnosis and treatment and are not rigid formats. They do permit and allow for the individual variations that each patient will present with a given problem, and the individual variations which any one example of a given disease entity will demonstrate in the course of diagnosis and treatment. It is the continuing responsibility of the Central Coordinating Committee to monitor these guidelines and revise them periodically in order to maintain the highest possible quality of care for the patients of this state. It should be stated again for emphasis that these guidelines do not in any way direct their attention to the matter of fees charged for services rendered.

As mentioned earlier in this report, a research project was developed with the help of Missouri Regional Medical Programs in an attempt to discover educational deficiencies and to recommend educational programs that would help resolve these deficiencies. The research approach to the project was to analyze each case that had been submitted to the Foundation for peer review to determine what the basic problem was as it related to appropriateness, quality, utilization, the mode of treatment and the cost. To supplement this data base, a Project Review Committee composed of Drs. Clem Grebel, John Matthews, and Robert Bregant launched a pilot study among physician members of the Health Care Foundation of Missouri to see if, indeed, these physicians would respond to an HCFM survey, and if they would respond, would such a survey approach yield significant data. The result of this investigation demonstrated that not only would the physicians respond, but that such a survey would yield significant data. Heartened by this initial experiment, the Foundation is now beginning to develop more meaningful surveys among its physician members that will assist the Foundation in its communications as well as in its educational programs.

The EMCRO project mentioned above, if it is accepted, will focus on the optimal programming for inpatient disease management. This project has arisen out of Foundation meetings with Missouri Regional Medical Programs, University of Missouri physicians, as well as with a study committee of the Joint Commission on Accreditation of Hospitals, from which should be evolved relatively soon a joint involvement of all organizations mentioned, particularly the Health Care Foundation, to be pursued in the hospital setting. Using the current available guidelines of the Health Care Foundation, plus more sophisticated revisions within the hospital framework, and employing a computer data base and using a health care analyst as the initial reviewer who will work with original hospital records, personnel, and staff physicians, it is quite apparent that when this becomes an ongoing activity it should do much to identify educational needs as far as inpatient hospital care is concerned, control unnecessary hospital admissions, reduce hospital stays and provide overall elevation of the optimum care which patients in the hospital setting will receive. This project has originally been started by Drs. Robert Mosser and Ed Twin at Kansas City General Hospital as a pilot project, and it is anticipated within the current 12-month period that it will be expanded to other larger community hospitals and, eventually, to the smaller hospitals in the nonurban areas.

In conjunction with this aspect of the Foundation's activities, the Foundation itself launched its own utilization review service that was designed primarily to relate to those smaller community hospitals that were having difficulties in providing adequate utilization review. In response to an initial letter to hospital administrators and chiefs of staff in all hospitals of Missouri, a rather positive response was obtained. Almost 30 hospitals have directly contacted the Foundation to ask them to meet with them and discuss this utilization review service. It is still in the experimental stage, but the initial reactions of those physician teams which have worked on the hospital utilization reviews at the request of these hospitals and their chiefs of staff has been most encouraging.

A great deal of time was spent during the past 12 months by the Health Care Foundation in evaluating its effectiveness of providing peer review in the Panel Areas. The lag time between the reception of a complaint from some party and the eventual processing of this complaint and arrival at an initial recommendation has still been too long as far as the Health Care Foundation has been concerned, as well as those parties such as physicians and insurance carriers with whom we have worked. We do believe, however, it has been improved considerably and should continue to do so. With adequate funding and the provision of more staff personnel to effect these reviews, the load on the physician members of the Panels and the lag time should continue to decrease. One concept which has been used on an experimental basis in Panel A, located in Kansas City, and Panel C, located in St. Louis, has been to subdivide the Panel Review teams into primary care panels and surgical panels, thus giving a little more specialized review of the cases submitted and still not losing the advantages of the conglomerate approach.

Much time on the part of staff and officers of the Foundation has been spent in trying to achieve better professional relations with third party payors. While there have been many difficulties in dealing with the Medicaid situation, of special note is the fact that there has been an increasingly satisfactory rapport with the Division of Welfare, and, with the passage of Public Law 92-603 and particularly the amendment more commonly referred to as HR-1 with its inclusion of the Professional Standards Review Organization, third party payors have been much more receptive to our overtures as it relates to future activities between those organizations and the Health Care Foundation. The Foundation has worked diligently to accommodate the implied changes in this PSRO legislation and still maintain a posture that would reflect the needs of the physicians of Missouri and their patients.

At the present time, there has been a major revision again of the Bylaws of the Health Care Foundation, which will be made official in the very near future. This has been done to restructure the Health Care Foundation and its five Panel Review Areas in the state of Missouri to accommodate the anticipated implementation of HR-1. These Bylaws should provide for a much more democratic organization than has existed heretofore. The Foundation will function independently from organized medicine, although all segments of organized medicine will have major input into the operation of the Foundation, and the Foundation will involve all physicians of Missouri regardless of membership in either of the two statewide physician organizations.

Inasmuch as no rules or regulations have been developed by the Department of HEW to implement the Professional Standards Review Organization, and feeling that, at least in Missouri, the Health Care Foundation has made some strides toward attempting to provide peer review; that with appropriate structural changes as set forth in the new Bylaws, it is not totally unrealistic to hope that, indeed, the Secretary of HEW after more thorough investigation and communication with the Health Care Foundation, will feel this could well be the basis for establishment of appropriate PSRO's in the state of Missouri. In spite of some of the concerns which individual physicians and organized medicine as a whole have held and still hold regarding this legislation, it is, nevertheless, totally apparent to those who have studied the matter thoroughly that, indeed, the physicians of this country will have to respond to the increased challenge which this legislation presents if we are, indeed, to maintain any control over the destiny of our profession and the patients which it serves. Failure to meet this challenge can meet with only one alternative, and that is bureaucratic control over the services which we provide and the manner in which they are provided. This would, indeed, be a sorry day for the profession and for the people of the United States.

The Health Care Foundation is, indeed, an organization that can perform a great service for the physicians of Missouri and their patients. It needs full physician endorsement and cooperation, as well as active participation.

Hector W. Benoit, Jr., M.D., Chairman

(The Speaker referred this report to the Reference Committee on Resolutions.)

Reports of Officers

REPORT OF THE SECRETARY

The Missouri State Medical Association had 4,428 members as of Dec. 31, 1972. This was an increase of 114 members over the previous year.

MEMBERSHIP CHANGES DURING THE YEAR

Members, Jan. 1, 1972		4,314
New Members admitted during year	289	
Reinstated	9	
Total added	298	
Members dropped during year	48	
Deceased	53	
Transferred to other states	70	
Resigned	13	
Total lost	184	
Net Gain		114
Members, Dec. 31, 1972		4,428

The Committee on Nominations, which is appointed by the President from the House of Delegates, must submit nominations for the following offices:

—Three Vice-Presidents to fill the expired terms of Paul F. Max, St. Louis; Charles A. McBurney, Slater; Truman B. Schertz, North Kansas City.

—A Speaker of the House of Delegates and a Vice-Speaker of the House of Delegates to fill the expired terms of E. D. Imes, Maryville, Speaker; and Robert A. Slickman, Kansas City, Vice-Speaker.

—Two Delegates and corresponding Alternates to the American Medical Association to fill the vacancies created by the expiration on Dec. 31, 1973, of the terms of Delegate, Arthur W. Neilson, St. Louis; Alternate, Robert W. Kelley, St. Louis; Delegate, Hector W. Benoit, Jr., Kansas City; Alternate, Hugh E. Stephenson, Jr., Columbia.

—The terms (two years) of the Councilors of the even-numbered districts expire this year. These Councilors are Lysle M. Bach, Hannibal, Second District; Louis P. Hetlage, Troy, Fourth District; William D. Bradshaw, Clinton, Sixth District; Howard J. McAlhany, Springfield, Eighth District; Eugene T. Hansbrough, Poplar Bluff, Tenth District. Delegates from these districts shall meet during the meeting, prior to the last day, and elect the Councilor for their district. The election shall be certified to the House of Delegates on a prescribed form which will be furnished.

The entire session will be held in the Chase-Park Plaza Hotel, St. Louis. The House of Delegates will hold its first session on Thursday, March 29, at 1:30 PM in the Khorassan Room. Reference Committees will meet in committee rooms in the hotel. The second session of the House of Delegates will convene at 4 PM on Friday, March 30 in the Khorassan Room. The final session of the House, a breakfast meeting, will be held in the Khorassan Room at 7:30 AM on Sunday, April 1.

Registration facilities will be open on Thursday, March 29, from 11 AM to 4 PM; on Friday and Saturday from 8 AM to 5 PM; and on Sunday from 7:30 AM to 9 AM. Registration will be in the Regency Room.

John I. Matthews, Secretary

Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

Uro-Phosphate®

NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, *300 mg.;* SODIUM ACID PHOSPHATE, *500 mg.*

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

IN ASTHMA
IN EMPHYSEMA

optional therapy

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

The diabetic who has too much...

too much sugar, too much fat.

Maybe the last thing she needs is more of her own insulin. Especially when you consider that many overweight diabetics already have normal or high levels of endogenous insulin and that insulin is lipogenic.

If she just won't diet and oral therapy is indicated in adult-onset, nonketotic diabetes.

DBI-TD® Geigy
phenformin HCl

lowers blood sugar without raising blood insulin.

For complete details, including dosage, please read the prescribing information. It's summarized below.

I® phenformin HCl
lets of 25 mg.
I-TD® phenformin HCl
ed-Disintegration
sules of 50 and 100 mg.

ications: Stable adult diabetes mellitus; sulfonyl-
a failures, primary and secondary; adjunct to
ulin therapy of unstable diabetes mellitus.
ntraindications: Diabetes mellitus that can be
ulated by diet alone; juvenile diabetes mellitus
t is uncomplicated and well regulated on in-
in; acute complications of diabetes mellitus
etabolic acidosis, coma, infection, gangrene);
ring or immediately after surgery where insulin
ndispensable; severe hepatic disease; renal dis-
e with uremia; cardiovascular collapse (shock);
er disease states associated with hypoxemia.
rnings: Use during pregnancy is to be avoided.
cautions: 1. *Starvation Ketosis:* This must be
erentiated from "insulin lack" ketosis and is
racterized by ketonuria which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.**

2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis.

3. *Hypoglycemia:* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin.

Adverse Reactions: Principally gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake. (B) 98-146-103-E (6/72)

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

DBI 9105

What should a medication for sleep be expected to provide?

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years
of age. Though physical and psychol
dependence have not been reporte
recommended doses, use caution in
ministering to addiction-prone indi
or those who might increase dosage

Precautions: In elderly and debilita
initial dosage should be limited to 1
to preclude oversedation, dizziness
or ataxia. If combined with other dr
having hypnotic or CNS-depressant
effects, consider potential additive e
Employ usual precautions in patien
who are severely depressed, or with

Sleep for 7 to 8 hours without need to repeat dosage during the night

No sleep medication has been as rigorously evaluated in the sleep research laboratory as Dalmane. Insomnia patients given one 30-mg capsule of Dalmane at bedtime, on average: fell asleep within 17 minutes, had fewer nighttime awakenings, spent less time awake after sleep onset, and slept for 7 to 8 hours with no need to repeat dosage during the night.

Sleep with consistency

Dalmane has been shown to be consistently effective even during consecutive nights of administration. Thus there is little likelihood for the need to increase dosage to maintain therapeutic effect.

Dalmane (flurazepam HCl) is a distinctive sleep medication—a benzodiazepine specifically indicated for insomnia. It is not a barbiturate or methaqualone, nor is it related chemically to any other available hypnotic.

Sleep with relative safety

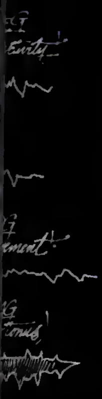
Chronic tolerance studies have confirmed the relative safety of Dalmane; no depression of cardiac or respiratory function was noted in patients administered recommended or higher doses for as long as 90 consecutive nights. Dalmane is generally well tolerated and morning "hang-over" is relatively infrequent. Dizziness, drowsiness, lightheadedness and the like have been the side effects noted most frequently, particularly in elderly and debilitated patients. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

DALMANE®
(flurazepam HCl)
When restful sleep is indicated

One 30-mg capsule *h.s.*—usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*—initial dosage for elderly or debilitated patients.

ROCHE

ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110



depression or suicidal tendencies.
dic blood counts and liver and kid-
nction tests are advised during
ted therapy. Observe usual precau-
n presence of impaired renal or
ic function.

se Reactions: Dizziness, drowsi-
lightheadedness, staggering, ataxia
lling have occurred, particularly
erly or debilitated patients. Severe
ion, lethargy, disorientation and
probably indicative of drug intoler-
or overdosage, have been reported.

Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

Opinion & Dialogue

"Prescription drugs – who should determine the maker?"

Dispenser of Medicine

Clifton J. Latiolais
President
American
Pharmaceutical
Association

Maker of Medicine

C. Joseph Stetler
President
Pharmaceutical
Manufacturers
Association

"Too many doctors are indi
ent to the econornic consequenc
their decisions." So stated a rece
issue of *Medical News Report* (D
cember 4, 1972), an independer
weekly newsletter published by f
AMA Chief Executive F. J. L. Blas
game, M.D.

Doctor, are you indifferent . . . ?

In discussing an anticipate
crease in Blue Shield rates, Dr. B
ingame's newsletter had this to s

"In general, it can be said,
have given the impression they a
not particularly concerned with t
increase in cost of health care to
patients . . .

"True, an MD's training is p
marily scientific, but in the real v
of practice, all of his scientific de
sions have a price tag, or an ecor
impact. The economics of health
beckon the practitioner's attenti
Concern for economics of medic

When the pharmacist recor
mends that a drug product other
the one ordered be dispensed, th
prescriber invariably permits the
change when he feels the best in
ests of the patient will be served.

Shortcomings of Pro-Substitution Argument

The fact remains that it is n
sary for the prescriber to know th
the change is being contemplate
and to be in a position to consent
demur. Without that opportunity,
unilateral decision of the pharma
made in the absence of clinical k
edge of the patient, could expose
to needless risks, and in addition
jeopardize the relationship betw
the professions of Pharmacy and
Medicine. In my view, there is not
in the pro-substitution argument
offsets these risks.

The Issue of Drug Knowledge

Substitution advocates clai
that the primary justification for
changing the rules is the desire t
better utilize pharmacists' knowl
about drugs. Yet the pharmacist'
task to keep current on the entire
field of drug therapy, to some de
puts him at a disadvantage. Most
often, a practicing physician will
expert knowledge of no more thar

Advertisement

uld be an obligation of medical ctice...

“Medical societies ought to con- t continuing campaigns to point the substantial savings that could ealized thru deductible insurance protection for catastrophic ill- s. At the very least, they should, in patients' interest, question the ics of any insurance organization raises health care costs by forc- policyholders to buy insurance may not need or want and prob- won't ever use.

“Too many doctors are indiffer- to the economic consequences of r decisions. Too many, for ex- le, habitually hospitalize patients he convenience of the MD. It's sense to deny such habits exist...

“Doctors, thru their medical so- ies, have unhesitatingly appealed eir patients for support in the t against government interference the private practice of medicine. the public in the past has re- nded. It's time the American Med- Association and state and local dical societies paid off the debt by isive action to hold down the cost edical care.”

t of Drugs

Insurance rates and hospital rges are only two factors in health care costs. The cost of drugs—both prescription and nonprescription—is another.

And when it comes to drug costs, the nation's pharmacists *are concerned.* Through their national professional society, the American Pharmaceutical Association, pharmacists are advising the public to use nonprescription medication cautiously and conservatively, and to seek the advice of their pharmacist before selecting or purchasing such drugs.

Outdated Laws

The pharmacist also is aware that when it comes to prescription drugs, often he has an even greater opportunity to reduce the cost to the patient—with no sacrifice in the quality of the medication dispensed. But in many states, outdated and antiquated laws prevent the pharmacist from engaging in drug product selection. “Drug product selection” simply means that the pharmacist functions in the patient's interest by consciously choosing, from the multiple brands available, a low-cost quality brand of the specific drug to be dispensed in response to the physician's prescription order.

Much *misinformation* has been purposely spread by those who stand to gain financially by maintaining high drug costs to the public. An endless stream of propaganda has emanated from the drug industry in an effort to persuade the medical profession that these so-called anti-substitution laws should be retained. And as long as these laws are retained, the drug industry will continue its current marketing practices which contribute unnecessarily to high drug costs to patients. These practices also are inviting government agencies to expand their restrictive controls on physicians and pharmacists.

APhA Efforts

As pharmacists, we are concerned about health care costs. We hope that every physician shares our concern on this vital issue, and will give his personal support to the constructive efforts APhA has undertaken in the interest of all patients.

(For a complete discussion of drug product selection, you are invited to request a free copy of the “White Paper on the Pharmacist's Role in Product Selection” from: American Pharmaceutical Association, 2215 Constitution Avenue, N.W., Washington, D.C. 20037.)

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30 drugs that he selects to treat the jority of conditions encountered in practice. Moreover, the physi- n's choice of a specific brand is ed on his knowledge of the pa- nt's medical history and current dition, and his experiences with particular manufacturer's duct.

Some substitution proponents e argued that the dispensing of a scription is a simple two-party nsaction between the pharmacist the patient, and that a substitut- pharmacist may avoid even a hnical breach of contract by simply ifying the patient that he is making substitution. I would judge that courts would be sympathetic ard a pharmacist who substituted hout physician approval and who dertook a legal defense that seeks make the patient responsible for pharmacist's actions.

duced Prescription Prices?

Substitution advocates are ggesting to the consumer, and par- ularly the consumer activist, that duced prescription prices could low legalization of substitution. have seen absolutely no evidence ustify this claim. To the contrary, perience in Alberta, Canada, where ostitution is authorized, suggests the opposite.

Many pharmacists understandably are concerned about the cost of maintaining multiple stocks of similar products. While there is no doubt that inventory costs rise when additional brands are stocked, it would be interesting to know how much they rise, and how many pharmacists actually stock *all* brands—of, say, ampicillin or tetracycline—or how long they keep “slow moving” products on their shelves before they are returned for credit. To ask that the industry eliminate multiple sources is to ask competitors to stop competing.

Drug Substitution—A License for the Unethical

Anti-substitution repeal would favor “corner cutting” pharmacists and manufacturers. For them, free substitution would be not a right, but a license. As an aftermath, it is quite likely that the confidence of both physicians and patients in the profession of Pharmacy would be eroded, as revelations about the unconscionable behavior of an undisciplined few were magnified in the press or in professional circles.

Summary

In short, what the American Pharmaceutical Association advocates as a broad-spectrum panacea looks to us to be not only a minority view (advocacy of substitution is by no means a uniform policy in Pharmacy), but also an extraordinarily costly and ineffective remedy, whose side effects are odious. We believe (1) that an impressive majority of pharmacists prefer to work with Medicine and with industry, for the consumer, and for the general good, (2) that they seek the privilege to substitute when the patient might gain and when the patient's doctor agrees, and (3) that they seek to work for the resolution of genuine grievances openly and professionally.

(For amplification of PMA views, please write for our booklet, “The Medications Physicians Prescribe: Who Shall Determine the Source?” It is available from: Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.)

Pharmaceutical
Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

P·M·A

(Referred to the Reference Committee on Reports of Officers.)

REPORT OF THE TREASURER

The report of the Treasurer is covered in the Financial Statement which appeared in the March, 1973 issue of Missouri Medicine and in the Delegates Handbook. Therefore, it is not repeated here.

Charles R. Gulick, Treasurer

(Referred to the Reference Committee on Reports of Officers.)

REPORT OF THE EXECUTIVE SECRETARY

Your Headquarters Staff has worked diligently during the past year under the direction of the Council, Officers and various Association Commissions and Committees on the many activities of the Association.

Annual sessions of the Missouri General Assembly, now being held, are considering a large number of legislative bills each year affecting medicine. A great deal of time is spent by members of your staff in following these bills, in scheduling physicians to appear before committees of the Legislature and in educational activities relating to these bills.

The new office of your Association to be located at 113 Madison Street in Jefferson City is one and one-half blocks from the State Capitol Building, and there is evident advantage here. More details concerning the new office are contained in the minutes of the Council Meetings in which the Building Committee has reported. Hopes are to move into the new office in late spring or early summer.

The Caribbean Cruise for members of MSMA on Nov. 11-18, 1972, must be rated a success. Many complimentary letters from physicians who took the tour have been received in the office. You have already received an invitation by mail to participate in another MSMA-sponsored tour in July, 1973 and properly termed "Your Scandinavian Adventure." Contact our Association Office for additional information at any time.

The Public Affairs Conference held on Feb. 3-4, 1973 at the Ramada Inn, Jefferson City, produced a total attendance of some 125 people. The MSMA Woman's Auxiliary Board Meeting was held in conjunction with the Conference and their participation was most appreciated and helpful. The programs of these Annual Conferences are carefully selected by the MSMA Public Affairs Commission and have much to offer every member of the State Medical Association. There must be a way to increase the attendance of these conferences. We are earnestly looking for it.

A constant effort is made by staff to assist physicians who contact the Association Office to find a satisfactory practice location. Our efforts also are directed toward assisting communities in securing needed physicians as well as established physicians seeking associates.

Other activities of the staff are associated with projects and programs of various Association Commissions and Committees which are reported through written reports in your Delegates Handbook and have been presented in Missouri Medicine.

On June 1, 1972, Mr. C. C. (Cork) Swarens of Jefferson City joined our staff as Public Relations Director. We are most pleased to have him on our team.

Mrs. Bertha Thomas, who many of you have known for years, will retire as of April 1, 1973. She has been with the Association since *May, 1943*. Bert deserves the sincere appreciation of every member of this Association for the many years of devoted service she has given to organized medicine. I am confident that she has the very best wishes for the future from all of us.

I would be amiss if I did not use this opportunity to express my sincere appreciation and thanks to all of your State Association Headquarters employees for their cooperation and diligent service.

Raymond McIntyre, Executive Secretary

(Referred to the Reference Committee on Reports of Officers.)

Reports of Standing Committees

REPORT OF THE COMMITTEE ON CONSTITUTION AND BYLAWS

The first item discussed was the constitutional amendment concerning referendums amending Article IX of the MSMA Constitution. The amendment accepted by the House of Delegates at the 1972 Annual Session provides:

> "Petitions signed by 10% of the active members of the Association, including petitioners representing at least one half of the component medical societies, will initiate a referendum regarding changes in the Constitution or Bylaws or questions before the House of Delegates or Council. A majority vote of all active members of the Association responding shall determine the question."

It was the consensus of the Committee that this provision as accepted gives rights to the minority of the members, but does not protect the majority. Under the present Constitution, the House of Delegates may amend any Article of the Constitution or Chapter of the Bylaws by a two-thirds vote of those present and voting. Under the proposed change a simple majority of those voting could determine the question. Several states, including Illinois, have adopted a requirement of a two-thirds majority on all questions submitted under a referendum.

The Committee recommends to the Council and the House of Delegates that the Constitutional amendment accepted by the House during the 1972 session *not be adopted*. It further recommends the acceptance of the Reference Committee recommendation:

> "Petitions signed by 10% of the active members of the Association, including petitioners representing at least one half of the component medical societies, will initiate a referendum regarding changes in the Constitution or Bylaws or questions before the House of Delegates or Council. *A majority vote of all active members of the Association shall determine the question."*

. . . or suggests as an alternative the recommendation that *"a two-thirds vote of all active members of the Association responding shall determine the question."*

Either of the above changes would protect the rights of all members.

The next item on the agenda was the implementation of Resolution #8, "Representation for Medical Students," adopted by the House of Delegates during the 1972 Annual Session.

The Committee recommends that Article IV of the Constitution be amended by adding the following sentence thereto:

> "Included also in the House of Delegates shall be two student delegates, each from a different class, elected by the student body of each of the medical schools in the State of Missouri, who shall have the same rights and privileges as other delegates."

If this change in the Constitution is adopted, a corresponding change will be necessary in the Bylaws. The Committee recommends the following amendment to the Bylaws that would amend Chapter 111 of the Bylaws by adding the following paragraph to Section 2 and be numbered Section 2A and to read as follows:

> "Each of the medical schools in the State of Missouri shall be entitled to send each year two student delegates, each from a different class, elected by the student body of the said medical school. The names of such student delegates shall be certified by the Dean of said medical school to the Secretary of this Association thirty days before the Annual Session. Such student delegates shall have all the rights and privileges of all other delegates."

It was pointed out by the Chairman that if this Constitutional amendment could be adopted on Thursday, during the first session of the House of Delegates, the Bylaws could be brought up for adoption at the second session of the House on Friday.

Staff was directed to contact the Deans of the four medical schools and inform them of the procedures for electing student delegates and request that elections be held and the names of the student delegates be certified by the Deans.

Staff also was directed to inform the Deans that if the Constitutional amendment and the Bylaws change were not adopted the designated student delegates could still sit in the House as guests.

The Committee studied the Planning Committee report concerning Resolution #27, "Definition of Council Chairmanship" referred by the House of Delegates at the 1972 Annual Session to the Committee on Planning and the Committee on Constitution and Bylaws. The Planning Committee originally recommended to the Council that this Resolution be implemented. After study it was pointed out that the resolution would be quite difficult to fully implement. The Council re-referred this to the Planning Committee. The Planning Committee tabled this resolution and the Council adopted this report.

The Chairman also informed the Committee of the legal counsel's opinion clarifying the status of the Immediate Past-President sitting on the Council. The Planning Committee had requested this opinion. Legal Counsel informed the Planning Committee, "The Immediate Past-President is a member of the Council by virtue of the Constitution. He is not an Officer or a Councilor, but is on the Council in an advisory capacity for continuity." On motion, the Committee accepted this opinion.

Kenneth C. Hollweg, Chairman
Paul F. Max
Miles C. Whitener
Joseph Conrad
Edwin M. Powell

(Referred to the Reference Committee on Constitution and Bylaws.)

REPORT OF THE COMMITTEE ON PUBLICATION

The 69th volume of Missouri Medicine was completed with the publication of the Dec., 1972 issue. During the year, 13 issues were printed and distributed. Eleven of these issues contained scientific papers, special articles, organizational reports, monthly messages from

115th House of Delegates

The first session of the House of Delegates was held in the Khorassan Room of the Chase-Park Plaza Hotel. The Delegates shown here are considering a resolution which is being read by the Speaker.

the Presidents of the Association and the Auxiliary and news and other items of interest to members of the medical profession. The July 1 issue contained the official proceedings of the 1972 (114th) Annual Session of the MSMA House of Delegates. The July 15 issue was the annual Membership Directory.

There were two special issues of the Journal. The scientific articles in the April issue were contributed by members of the faculty of the University of Missouri-Columbia School of Medicine and the articles in the December issue were contributed by members of the staff of Ellis Fischel State Cancer Hospital and Cancer Research Center.

Missouri Medicine published its first supplement to a regular issue in May, 1972. The 44-page supplement, which could be removed from the main journal, was cosponsored by the Missouri Society of Pathologists and the University of Kansas School of Medicine.

During the year, 56 scientific papers and 12 special articles were published. Most of the articles were written by Missouri authors.

The Editors wish to express appreciation to all authors who submitted scientific manuscripts and to all other individuals, institutions and organizations, including the administrations, faculties and publications departments of the University of Missouri in Columbia and Kansas City, St. Louis University, Washington University and Ellis Fischel State Cancer Hospital for their valuable contributions.

At the year's end, the Journal circulation was 4,900.

The complete financial report for the Journal is included in the financial statement for the Missouri State Medical Association for the year 1972. The report was published in the March, 1973 issue of Missouri Medicine and is included in the Delegates' Handbook.

Joseph V. Finnegan, Chairman
William C. Mixson
Charles S. Sherwin
Byron M. Stuart
Wilfred E. Wooldridge

(Referred to Reference Committee on Reports of Officers.)

REPORT OF THE COMMITTEE ON LEGISLATIVE AFFAIRS

There was a considerable amount of work and planning done prior to the 1973 Session. We established preliminary legislative goals during the summer of 1972. We were then able to draft legislation and obtain legislative sponsors of our program in time to enable many of them to be prefiled by Senators and Representatives during the December prefiling period.

The 1973 Session, the first session of the 77th General Assembly, has introduced approximately 70 bills that are of interest to medicine. Many of these are quite important bills and are followed closely by the Committee and the Staff. MSMA has supplied a number of witnesses, principally in support of good health legislation. Annual Sessions have precipitated almost year-round activity for the Committee and the MSMA Staff.

Once again, this Committee cannot emphasize strongly enough the absolute necessity of physicians participating at the local level not only in legislative affairs, but in primary and general elections as well. So often the members of our Committee and Staff hear from legislators that the physicians in their local area have not been in contact with them. We urge all physicians to become interested in legislative matters, to stay abreast of legislative trends and to effectively communicate on a continuing basis their opinions to their respective legislators. We also strongly urge each physician to support the candidate of his choice both financially and by active campaigning on behalf of the candidate. It is extremely important for all physicians to maintain rapport with their legislators.

We wish to express our appreciation to the Woman's Auxiliary to the MSMA for establishing a legislative chairman and more than 60 key women to maintain contact with their legislators.

John I. Matthews, Chairman
Gerald L. Miller
James C. Cope
Walter T. Gunn
Robert E. Bregant

(Referred to Reference Committee on Miscellaneous Affairs.)

REPORT OF THE COMMITTEE ON PLANNING

The following recommendations of the Committee have been submitted to the MSMA Council:

1. It is recommended that further information be obtained on the possibility of obtaining medical students after their first year of medical school, working as assistants in physicians' offices during the summer.
2. It is recommended that the Council study the possibility of relinquishing our tax exempt status under IRS regulations for nonprofit corporations.
3. House of Delegates Resolution #27, Subject: "Council Chairmanship," that was rereferred by the Council to the Committee for reconsideration and report before the Annual Meeting was tabled.
4. The Committee is of the opinion that strict adherence to tradition constitutes a continuing deterrent to the sustained involvement of competent and interested members of the Association. The Committee recommends to the Council that an appropriate study be made of this problem.
5. The Committee recognizes the continuing problem of communications and suggests that the Communications Committee (1) advocate the use of short, personal letters from Councilors to members of their District (2) maintain closer liaison with hospital staffs. Possibly a representative of each hospital staff could be designated to receive and disseminate communications from the Association.
6. The Committee suggests that the Health Care Foundation of Missouri study the possibility of developing a certified hospital admission program.
7. It is recommended that the Council study the feasibility of retaining competent management consultants to recommend possible income producing programs for the Association.

David N. Kerr, Chairman
William D. Bradshaw
J. Will Fleming
Oral B. Crawford
James A. Hasek
Hector W. Benoit, Jr.
Charles P. McGinty
James C. Cope
Albert Cross
C. Read Boles

(Referred to the Reference Committee on Reports o Officers.)

REPORT OF THE COMMITTEE ON VOLUNTARY HEALTH AGENCIES

The Committee has not had reason to have a meeting his past year and, therefore, does not have an official report to submit. The Committee, however, does stand eady to receive any requests from the Council or from he House of Delegates that might be appropriate for this Committee to handle.

William C. Allen, Chairman
Joseph L. Fisher
Charles E. Lockhart
Max E. Teare
Melvin A. Cassel

Reports of Commissions and Ad Hoc Committees

REPORT OF THE COMMISSION ON PUBLIC AFFAIRS

(This report includes all reports of ad hoc committees set up nder this Commission.)

Activities of the Missouri State Medical Association's Commission on Public Affairs in the past year included ontinuation of ongoing projects, study and recommendaions on matters referred from the House of Delegates nd Council and proposed study of improvement of the public image of organized medicine.

Beginning in July, the Commission, with Council approval, began a joint project with the Parent-Teachers Association, the State Department of Education, the Division of Health and the Missouri Association of Osteopathic Physicians and Surgeons for a series of workshops o be held at 19 locations in the state. An Ad Hoc Committee on Venereal Disease was named and, after meetng with the other organizations to develop a curriculum, 14 physicians were selected to represent the MSMA at various VD workshops held during March. Osteopaths manned the remaining workshops.

This project is likely to be continued for several years ince the scope has been changed from emphasis on venereal disease to the development of a comprehensive health education program for the schools of Missouri.

An Ad Hoc Committee chaired by Dr. Hubert Ritter of St. Louis arranged another thought-provoking, quesion-answering Public Affairs Conference, which was held February 3-4 in Jefferson City.

For the first time, the Conference was held in conjuncion with the Winter Board Meeting of the Woman's Auxiliary to the MSMA. This led, in large part, to a fair ncrease in attendance. Registration was up from 81 in 1972 to 125 in 1973. The issue-oriented program featured enlightening presentations on organized medicine, state and national health-related legislation, health care foundations and politics.

The Commission is currently studying methods to improve attendance at future Conferences. Some of the deas currently under study are alternating the Conference location to our urban areas, holding the Conference n October to coincide with the added attraction of either a Chief's or Cardinals' football game and changing the name from Public Affairs Conference to Leadership Conference.

Again this past year, the Commission was actively involved in development and promotion of the "Large and Small Hospital Organization of the '70s" Mini-Estes Seminar, which was held on March 1-2 in Columbia. Co-sponsoring the seminar with the MSMA were the Missouri Hospital Association, Missouri Association of Osteopathic Physicians and Surgeons, Missouri Regional Medical Program and Bi-State Regional Medical Program.

The "Mini-Estes" seminar is designed to improve communications between physicians, hospital administrators and hospital boards of trustees.

Some of the matters submitted to the Commission by the House of Delegates and Council were as follows:

Pediatric Coordination Council of Missouri—The Commission recommended support of the new Council with the addition of representatives from the Missouri Chapter of the Academy of Family Physicians and the Missouri Department of Education.

Consumer Health Information Program (CHIP)—This project of the University of Missouri Extension Division was reviewed and the Commission recommended that the MSMA Council request periodic progress information from CHIP officials.

Mobile X-Ray Units—The Commission investigated the methods and effectiveness of mobile x-ray units operating in Missouri and other states. It recommended that the MSMA Council endorse new guidelines established by the Tuberculosis Society of St. Louis and Eastern Missouri which limit mobile x-ray unit activity to high incidence areas or where the unit is requested by local health officials.

A high-priority item for the coming year will be the seeking of ways to improve the public image of organized medicine. This problem has been discussed for years, but, hopefully, positive ideas will be forthcoming.

Following this report are supplementary reports from the Commission's Ad Hoc Committee on Emergency Medical Services and Ad Hoc Committee on Environmental Health.

Richard P. Bowles, chairman
Troy Morgan
R. A. Ritter, Jr.
C. Keith Whittaker
Stanley G. Hall
J. E. Block
Joseph Kendis
W. W. Tillman, Jr.
John L. Barnard, Jr.
Allen Klippel
Joseph Zimmerman
H. V. Guhleman, Jr.
Hubert Ritter
A. W. Neilson
Richard Sutter

REPORT OF THE AD HOC COMMITTEE ON EMERGENCY MEDICAL SERVICES

The Ad Hoc Committee for Emergency Medical Services met on several occasions along with the Commission on Public Affairs.

It is the realization of all concerned that a major problem to be met in this state is a lack of money not only for Emergency Medical Service but for many other services and a lack of understanding of the need by many of the members of the Legislature.

Throughout the spring and summer, several members of the Commission served on the Ad Hoc Committee under the auspices of the Comprehensive Health Planning Agency. These meetings concluded in a program which outlined the needs and goals for a statewide Emergency

In his official report to the House of Delegates, President Walter T. Gunn discussed current problems and future goals of the MSMA and again urged all physicians to "get involved."

System. This program has been accepted by the Review Committee for CHP and by the CHP Board, but little implementation can be expected unless some funds from within or without the state can be found.

This proposed program for statewide system of Emergency Medical Services is a basis upon which we can build and a resolution from this committee will be presented to seek an Ad Hoc Committee to push this program.

Allen P. Klippel, Chairman
Marshall Conrad
John Wallace
Robert Burgess
Louis P. Hetlage
Frank B. Matteson
Frank L. Mitchell
James D. Dexter
John T. Crowe
Thomas J. Fischer
John L. Barnard, Jr.
Wm. H. Snead, Jr.
James R. Cook

REPORT OF THE AD HOC COMMITTEE ON ENVIRONMENTAL HEALTH

The efforts of physicians in Missouri on behalf of improved environmental health are of long standing; they are broad in scope; and they are continuing. The direct effects of physicians' efforts have become increasingly difficult to measure, primarily because concern for the environment has become diffused through the public-at-large and because of the growth and proliferation of relevant governmental agencies.

In the past 40 years, Missouri physicians have been prominent in successful campaigns for smoke abatement, milk inspection and fluoridation, on an *ad hoc* basis. For the past eight or ten years, the St. Louis Medical Society has had an Environmental Health Committee, and for the past four or five years, the Commission on Publi Affairs of the Missouri State Medical Association has ha a Committee on Environmental Health. These commit tees have studied environmental problems in Missou and in metropolitan St. Louis and have sought to publi cize these problems, seek solutions and support efforts t realize the solutions.

Missouri physicians are prominent members of th Governor's Task Force on Occupational Health and Safe ty. They have worked with the Missouri Conservatio Federation and the Missouri Conservation Commissio fighting to bring health to all Missourians through e largement of the conservation effort. The Missouri Stat Medical Association has passed a resolution declaring i support for conservation in the state as a direct conditio of public health.

The MSMA Committee on Environmental Health h cooperated with hospitals, physicians and public healt bodies on a city, county and state level to support e forts to control water pollution, air pollution and dispos of hospital waste products. There is a group studying l cal problems under the County Health Department.

On the local level, physicians in Missouri have bee actively involved in environmental aspects of Compr hensive Health Planning. Through the heat and fury the public outcry against lead poisoning, the state's ph sicians have worked quietly and conscientiously to ou line the medical aspects of the problem and to guide go ernment in its efforts to alleviate it. In St. Louis, phys cians cooperated with the federal Environmental Prote tion Agency in a successful effort to bring the Agency CHESS (Community Health Environmental Surveillan System) program to the metropolitan area.

The environmental movement now has full time, pr fessional leadership in and out of government. We ha found that the role of physicians is limited to direct a tion for limited goals, along with cooperation in broa based efforts to work toward solution of the major pro lems. We in Missouri do not, and should not, feel unco fortable in this role. On the other hand, anything le than continuing dedication by physicians to improveme of environmental health, by whatever means, is u worthy of the medical profession. While the publici and the glamor seem likely to go elsewhere, the phys cian still finds his special knowledge and concern, whi not always avidly sought, nevertheless necessary to t effort to clean up the environment.

As the environmental movement has grown, it has ta en on all the difficulties associated with size—poor co munications, an inflexible bureaucracy, confusion, jea ousy. Nevertheless, we feel that we are making progre and that we will continue to progress.

Arthur W. Neilson, Chairman

(Referred to Reference Committee on Miscellaneo Affairs.)

REPORT OF THE COMMISSION ON MEDICAL ECONOMICS, THIRD PARTY MEDICINE AND GOVERNMENTAL RELATIONS

(This report includes all reports of ad hoc committees set under this Commission.)

Our Commission held two meetings during the pa year. Most of the work of the Commission is divid among four ad hoc committees to study respective are of concern. Reports of three of these ad hoc committe follow the Commission report.

We recommended to the Council after our June me

g that close liaison be maintained with the Division of
Velfare concerning the federal management audit of pa-
ents in professional nursing homes. Mr. Proctor Carter,
ho was then Director of the Division of Welfare, pre-
nted excerpts from a management audit recently com-
leted by the federal auditors. These lay auditors exam-
ed records, discussed cases with nurses and observed
18 patients in ten nursing homes. In their opinion, 67%
f these patients may not have needed skilled nursing
are. Based on these cases, they projected that approxi-
ately $4 million should not have been paid to profes-
ional nursing homes. This appears to be an encroach-
ent by federal auditors into the fields of medical judg-
ent and evaluation. It was noted that 18 of the patients
bserved have died since the audit.

Our Commission recommended that Phase 2 informa-
on concerning physicians' fee screens under Medicare
e published in MISSOURI MEDICINE.

Our Commission recommended to the Council that the
election of alternative methods of collecting charges
rom the Medicare patient is the responsibility of the
reating physician and that the patient should not have
he option of demanding direct payment to himself for
physician's services. It recommended that the entire
roblem of third party payments going to patients in-
tead of providers needed to be studied and an ad hoc
ommittee chaired by Dr. Max Heeb of Sikeston was ap-
ointed to study and report its recommendations to the
Commission. The Third Party Payments Report follows.

The Commission recommended that the Council study
he possibility of making the brochure, "Medicare Mis-
onceptions," prepared by the Illinois State Medical So-
iety, available to MSMA members.

Two meetings have been held with officials of Aetna
oncerning the claims practices of the Aetna Life and
Casualty Company. We also have reviewed the AMA
Council on Medical Services report concerning the efforts
f the Council to correct the objectionable practices
hrough continuing discussions with Aetna representa-
ives and their listed changes in procedures which Aetna
ad committed the company to effect in order to resolve
lifferences with the medical profession. In the January
ssue of MISSOURI MEDICINE, members were requested
o comment on unsatisfactory claims practices of any
ommercial carrier. Only one claim was forwarded to the
Commission and Aetna was not involved. The Commis-
ion suggests that in the future to prevent occurrences
uch as we have had in the past two years, that contin-
ed communications with commercial carriers be held to
revent and/or alleviate these problems.

Dr. Heeb's ad hoc committee developed the following
esolution that was unanimously adopted by the Com-
nission:

WHEREAS, There are two alternatives by which a physician ren-
lering service to a Medicare beneficiary may secure compensation,
1. Taking an assignment
2. By non-assignment and billing the patient directly.
WHEREAS, By non-assignment method the physician must issue
a sufficiently itemized receipted bill if the patient has paid his bill.
Or, issue a sufficiently itemized non-receipted statement by
which the patient may then be paid directly by the Medicare car-
rier.
WHEREAS, It is not uncommon for some Medicare recipients
who receive itemized non-receipted bills to collect from the Medi-
care carrier and fail to meet their financial obligation to the phy-
sician,
Be It Resolved, That it is the physician's option to use either al-
ternative he chooses in keeping with his judgment of the patient's
needs and the intent of the patient in meeting his obligations to the
physician.

We have discussed at length the report of the Ad Hoc Committee on the Negotiation of Professional Fees and the Constitution and Bylaws for an organization that could represent the physicians in their dealings with employers, third party carriers and fiscal intermediaries.

Our Commission recommends that the MSMA Council and the MSMA House of Delegates approve an organization formed as outlined under the Ad Hoc Committee report that follows which includes the proposed Constitution and Bylaws.

STANLEY S. PETERSON, Chairman
FRANCIS M. MAPLE
VICTOR B. BUHLER
MARK D. EAGLETON
E. E. WADLOW
ROLLA B. WRAY
CHARLES W. CHASTAIN
BLAINE Z. HIBBARD
E. WARREN ALLEN
ROBERT H. LUND
HERBERT C. WIEGAND
MAX A. HEEB
KENNETH K. KEOWN
RAE W. FROELICH
LOUIS P. HETLAGE

REPORT OF THE AD HOC BLUE SHIELD COMMITTEE

The Ad Hoc Blue Shield Committee reports that:

1. A pernicious effort to place Blue Shield under the control of the State Insurance Department is currently pending in the State Legislature. This would severely limit Blue Shield's flexibility in offering new programs, would cause an automatic fee increase to subscribers and is grossly discriminatory in that similar health expense coverage plans sponsored by labor unions would not be regulated.
2. An open panel plan to cover all medical expenses (with a slight deduction for office calls) will shortly be offered to the public by Missouri Medical Service.
3. Missouri Medical Service (St. Louis Blue Shield) now has a plan for mail election of outstate representatives to the Voting Board, as suggested by the State Medical Association.
4. Missouri Medical Service has changed its bylaws to allow osteopathic membership on the Voting Board and Board of Trustees, as recommended by the Missouri State Medical Association.
5. Physicians treating transient patients who are members of other Blue Shield plans are urged to bill those plans directly, to avoid the situation which has arisen when out of state patients have collected from their Blue Shield plans for Missouri physicians' services, and not reimbursed the Missouri physician.

CHARLES W. CHASTAIN, Chairman
FRANCIS M. MAPLE
HERBERT C. WIEGAND
BLAINE Z. HIBBARD
ROY W. PEARSE
E. E. WADLOW

REPORT OF AD HOC COMMITTEE ON THIRD PARTY PAYMENTS TO PATIENTS

It was stated during our Committee meeting that it would be most helpful to insurance carriers in more properly honoring claims if physicians would be more specific in description of primary disease and/or injuries and complications, especially in the description of fractures. Lack of promptness on the part of the physician frequently delays processing and frequently increases the cost of processing because of needed special contacts in certain cases.

Workshops for administrators and medical secretaries held throughout the state are sponsored by the Missouri State Medical Association, the Missouri Hospital Association and by the Health Insurance Council. Representatives of carriers also are willing to be present at monthly medical secretary meetings to present educational programs on request.

Aetna's meeting with AMA officials concerning Aetna's communication to patients that under certain conditions arising out of a discrepancy between physicians' fees and Aetna's prevailing fee schedule, legal defense services would be offered was discussed at length. The present letter now in its fourth revision does not offer legal defense except under conditions of certain union-negotiated, nationwide contracts.

Medicare fee variancy problems for the same procedure, same fee charged, same diagnosis with different payments was admittedly an error by the Medicare carrier and can be appealed by requesting reconsideration for a new determination. If a new determination is not given, the physician may request an appeal for a fair hearing. If it is a non-assigned case, the patient may initiate the appeal. It has never been done, but it is permissible for a medical society to group individual appeals and request reconsideration. The physicians on our Committee urge insurance carriers to use standard HIC forms for claims at no charge and to charge the carrier $5 for any special forms. This recommendation does not appear to be in conflict with Section 7, Opinion 6 of the AMA Judicial Council.

The HIC form should be revised to include a provision for designating disability. It was also recommended that carriers adopt the AMA-CPT Third Edition Code and design a simplified one-sided form that will enable physicians to retain a copy for their files and provide a blank for the physician's name and ID number.

The Medicare billing situation in the Fifth Councilor District was studied and discussed at great length and a resolution was submitted to the Commission on Medical Economics to be included in their report to the Council concerning the several alternatives by which a physician rendering service to a Medicare beneficiary may secure compensation.

Max A. Heeb, Chairman
Rae W. Froelich
Donald H. Beisner

REPORT OF THE AD HOC COMMITTEE FOR THE NEGOTIATION OF PROFESSIONAL FEES

(Jan. 17, 1973)

The Greene County Medical Society, prior to the state meeting of the Missouri State Medical Association in 1970, passed a resolution resolving that the Missouri State Medical Association be directed to set up the mechanism for the negotiation of not only professional fees, but also the rules, regulations and procedures that establish the conditions under which the physicians render their services. They further resolved that the Delegates to the American Medical Association be instructed to establish a similar mechanism at the AMA level. The resolution was adopted by the House of Delegates and referred to the Council for further action.

The Council then referred the resolution to the Commission on Medical Economics, Third Party Medicin and Governmental Relations, which reviewed the situation and referred it to a special ad hoc committee for th negotiation of professional fees. Dr. Peterson was chai man of this committee and the other members were Joh T. Crowe, M.D.; Frank R. Williams, M.D.; Paul F. Ma M.D.; Miles C. Whitener, M.D.; and Elmer J. Schewe Jr., M.D. The ad hoc committee made a study and it wa decided it would be worthy of further exploration.

Thereafter, correspondence was instituted with the la department of the American Medical Association an with Mr. John Noble, the attorney for the Missouri Stat Medical Association. At this time, I appeared before th Council of Missouri State Medical Association and ind cated that we were proceeding according to its instru tions and that it would be necessary to have legal assis ance. Thereafter, the Medical Association appropriate $500 for this purpose.

Mr. Noble and I made a trip to Chicago where w visited with Mr. Bernard D. Hirsh, general counsel f the American Medical Association. At this point, it b came apparent that the AMA's policy was not to pr mote unionism, though they certainly were not antag nistic and were desirous of remaining in touch with o activities.

At the annual AMA meeting in 1970, the resolutio for negotiation of fees was referred to the Board Trustees for further study. As we proceeded with the a tivities in this field it became apparent that Mr. Nob would not have the time to devote to the project, and s after some length of time, we interested Mr. Max Lill of Springfield, Missouri, in the employment.

Our first approach was toward the establishment of mechanism within the MSMA to accomplish the desir end. We investigated other associations concerned wi the problems of doctors in this area. We undertook to e tablish communications with these groups and attend several meetings with them.

Legal counsel made an extensive brief of our legal p sition and has advised that it is not legally possible f the MSMA to be a mechanism for bargaining for fe and working conditions. Here we are talking the la guage of labor unions, and labor unions cannot be co porations, either general business corporations or not-fo profit corporations (such as MSMA). Unions must be u incorporated associations as proposed by the Constituti and Bylaws enclosed herewith.

The interest, which was only moderate when this pr ect was started some two years ago, is now at a high le el. At a national meeting which we attended (and, in dentally, became a rather vital part of), we were able identify upwards of 25,000 card-carrying union me bers. These ran all the way from a loose federation to o actual group which is affiliated with the AFL-CIO. T causes of this interest have multiplied remarkably duri the past two years. For the state of Missouri alone, would call to your attention the controversy which have with Aetna Life Insurance, the problems we ha with Medicaid, the fact that Medicare has reduced o income, the fact that the government has given the ph sicians special attention in the wages and prices laws, t planning for HMOs under the aegis of everybody fro the private insurance companies, hospitals, government agencies, themselves, and the most recent activities PSROs, which we have had to petition the governme for an advisory status.

A very important case can be made for the need f strong organization for negotiation. This can be accomplished under the document enclosed herewith. It has been recommended by the Ad Hoc Committee that this document be the basis for the mechanism for negotiation.

Stanley S. Peterson, Chairman
Frank R. Williams
Paul F. Max
Elmer J. Schewe, Jr.
John T. Crowe
Charles Miller

PROPOSED CONSTITUTION AND BYLAWS

PREAMBLE

We, the physicians of Missouri, in order to provide optimum medical care for the people of Missouri; in order to insure quality facilities for the provision of medical care; in order to enable physicians to give of themselves for the welfare of their patients; in order to insure adequate compensation for physicians commensurate with their training, skill and responsibility they bear for the life and health of their fellow human beings; do establish this Guild.

ARTICLE I

Purposes

The purposes of this Guild shall include, but not be limited to, the following:

1. To represent physicians in all socio-economic matters, negotiations and grievances with employers and third parties, the ultimate purpose being to promote better patient care and to prevent abuses and correct inequities in the delivery of medical services to the public.
2. To seek a voice equal to that of all others in all appropriate political, administrative, economic and legal aspects of health practice and care.
3. To seek to insure the maintenance of quality facilities for the provision of health care in order to enable physicians to give of themselves for the welfare of their patients.
4. To seek to insure adequate compensation and proper working conditions for physicians commensurate with their training and skill and the responsibility they bear for the life and health of their fellow human beings.
5. To assert the physicians' responsibility and right to assess and determine their individual roles in the practice of medicine as well as their collective interests in the establishment and maintenance of high standards of medical care in the community as a whole.
6. To promote the general welfare of all physicians and dentists who are members of this association toward the end that in the event of any misfortune occurring to them or in the event of their becoming aged, that they may be properly cared for and as far as is practical be maintained in the station of life to which they had become accustomed.

ARTICLE II

Name

The name of this Guild shall be: Missouri Physicians' Guild.

ARTICLE III

Structure

Section 1. **Districts**—The Guild shall be composed of no districts initially.

Mrs. Keith D. Jones of Warrensburg, President of the Woman's Auxiliary to the MSMA, reported to the House of Delegates during the first session. She cited accomplishments of the Auxiliary during 1972-1973.

Section 2. **Special Divisions**—The President may establish special divisions in this Guild. Such professional divisions may hold their own meetings. No special division may pass any rules or regulations unless the Executive Board and the general membership of the Guild specifically approve such rules or regulations. A special division may recommend rules or regulations and submit the same to the Executive Board and the general membership of the Guild for approval.

ARTICLE IV

Membership

1. Any person licensed to practice medicine or dentistry in the State of Missouri shall be eligible for membership in this Guild.
2. The fact that a person may be eligible for membership in this Guild does not mean that the Guild must admit him to membership.

ARTICLE V

Dues—Financial Obligations—Good Standing

Section 1. All dues and other financial obligations are due and payable on or before the 31st day of December of each year. Annual dues shall be prorated to the first of the month next following a new member's admission into the Guild.

All dues and other financial obligations not paid on or before the last day of the month in which the same are due shall become delinquent. Delinquent members shall not be entitled to any benefits heretofore or hereinafter referred to in the Constitution and Bylaws.

Members who fall in arrears two (2) months behind the date of payment of annual dues shall be readmitted as a member upon payment of Twelve and 50/100 ($12.50) Dollars readmission fee plus the payment of all unpaid membership dues plus any other financial obligations other than dues which he then owes the Guild.

ARTICLE VI

Guild Funds

The membership by majority vote at any regular meeting or at any special meeting called for the purpose may authorize disbursements of Guild funds for any purpose that shall directly or indirectly aid or serve the objects of this Guild.

All records pertaining to initiation fees, readmission fees, and other revenues of this Guild must be kept for a period of five (5) years.

ARTICLE VII

Guild Funds—Property Rights

Membership in this Guild shall not vest any member with any right, title or interest in or to the funds, property or other assets of this Guild, now owned and possessed, or that may hereafter be acquired, and each member hereby expressly waives any right, title or interest in or to the property of this Guild, including the funds of this Guild.

The title of all property, funds and other assets of this Guild shall at all times be vested in the Executive Board of this Guild for the joint use of the membership of this Guild, but no member shall have any severable, proprietary right, title or interest therein.

ARTICLE VIII

Revenue

The funds of this Guild shall be raised by membership dues and by such other means as the Guild may from time to time determine.

Membership dues shall include the following financial obligations due and owing by a member or applicant for membership: Initiation fees, readmission fees, annual dues and special fees including withdrawal fees and assessments.

Monies paid to the Guild by a member shall be applied to his obligations to the Guild in the following priority: 1. Assessments, 2. Initiation fees, 3. Readmission fees, 4. Withdrawal fees, 5. Annual dues.

ARTICLE IX

Initiation Fees

The initiation fees for the members of this Guild shall be set by the general membership by a majority vote and by secret ballot, in accordance with the applicable law. The initiation fees shall be voted upon only upon the affirmative recommendation of the Executive Board. No payments on account of initiation fees can be refunded.

ARTICLE X

Annual Dues

The minimum dues for the Guild shall be set by the general membership by a majority vote and by secret ballot, in accordance with the applicable law. The minimum dues shall be voted upon only upon the affirmative recommendation of the Executive Board.

Dues can be changed by a majority vote of the general membership of the Guild by secret ballot and upon the affirmative recommendation of the Executive Board.

No payment of Guild dues can be refunded.

ARTICLE XI

Withdrawals

A member to be eligible for a withdrawal card must be a member for at least one (1) year and must be
member in good standing as defined in Article V.

Members withdrawing from the Guild shall be exemp
from payment of all dues and assessments and shall for
feit the benefits of the Guild during the time they are ou
on a withdrawal card.

All withdrawal cards are good for a period of one (1
year from the date of issuance. Withdrawal cards ma
be renewed without charge upon request, either by mai
or in person.

No person shall be readmitted with the Guild if he ha
committed any offense against the working rules of thi
Guild.

If the withdrawal card is accepted, the following read
mission fees shall be paid: If the application for re
admission is made within one (1) month of the issuanc
of the withdrawal card, one twelfth ($\frac{1}{12}$) of the annua
dues; if such application is made within two (2) month
of such issuance, two twelfths ($\frac{2}{12}$) of the annual dues
if such application is made within three (3) months o
such issuance, three twelfths ($\frac{3}{12}$) of the annual dues
if the application is made within six (6) months of suc
issuance, four twelfths ($\frac{4}{12}$) of the annual dues; i
such application is made after six (6) months, a fu
year's dues shall be paid.

ARTICLE XII

Officers

The officers of this Guild shall consist of: Presiden
Vice-President, Secretary-Treasurer and nine (9) votin
members of the Executive Board elected from the mem
bership at large. No member shall be eligible for offic
in the Guild unless actively engaged in the practice
medicine or dentistry in the state of Missouri or workin
as an officer or employee of the Guild. The first officer
of this Guild shall serve until the annual election to b
held in December, 1973.

ARTICLE XIII

Duties of Officers

1. **President**—The President shall be the chief execu
tive officer of the Guild and the chairman of the Exec
tive Board and he shall preside at all meetings of th
Guild and of the Executive Board. He shall respons
ble for the overall management and conduct of the affai
of the Guild and shall be responsible for carrying out an
putting into effect all orders and resolutions of the Guil
and of the Executive Board. Unless otherwise ordere
and directed by the Executive Board, all agreements an
contracts on behalf of the Guild shall be executed by th
President or by the Vice-President in the absence of th
President.

2. **Vice-President**—The Vice-President shall assist th
President in the performance of his duties. He shall pr
side in the President's absence at meetings of the Guil
and at meetings of the Executive Board and he shall re
resent the President, when requested, at meetings or ot
er functions. He shall discharge all of the duties of th
President during the absence of the President or his i
ability to act or during a vacancy in that office. In the a
sence of both the President and Vice-President at an
meeting, then those present shall elect a temporary pr
siding officer for that meeting.

3. **Secretary-Treasurer**—The Secretary-Treasurer
the Guild shall keep the minutes and act as secretary
all meetings of the Guild and of the Executive Board. H

hall be responsible for giving all notices of meetings of he Guild and of the Executive Board. He shall be the custodian of the Guild's corporate books and corporate eal and shall affix the corporate seal of the Guild and atest to all proper papers and documents, the signing and execution of which have been properly authorized. He hall generally perform all duties incidental to the office of secretary and such other duties as may from time to ime be assigned to him by the Executive Board. He shall conduct the correspondence and keep the records of the Guild and of the Executive Board.

He shall have general supervision over the collection, custody and disbursement of the funds and assets of the Guild. He shall deposit said funds and assets or cause the same to be deposited in the name of the Guild in such bank, trust company or safe deposit company as the Executive Board may designate. He shall be responsible for all monies received by the Guild and for all payments made on its behalf and shall keep, or cause to be kept, complete and accurate accounts and records of such receipts and disbursements. Whenever required by the Executive Board, he shall render or cause to be rendered a complete financial accounting of said funds.

All checks in payment of Guild obligations shall be signed by the duly elected President and Secretary-Treasurer of the Guild and in the absence of the President by he duly elected Vice-President and Secretary-Treasurer. It is the intent of this provision that all checks must be signed by two (2) officers of the Guild. All checks and orders withdrawing funds from any bank, trust company or other financial institution, in payment of Guild obligations, in excess of Five Hundred ($500) Dollars, must be approved by the Executive Board. At the annual meeting of the Guild, the Secretary-Treasurer shall render a statement prepared by a certified public accountant, summarizing the receipts and disbursements of his office since the last statement. Said statement shall be presented to the Executive Board. He shall be prepared to submit a current Treasurer's report at all regular meetings of the Executive Board and the general meetings of the Guild.

4. **Compensation of Officers and Members of the Executive Board**—No officers of the Guild or member of the Executive Board shall receive any salary, compensation or emolument from the Guild or Executive Board, either directly or indirectly, unless authorized by the membership.

ARTICLE XIV

Term of Office, Nominations and Elections

1. **Term of Office**—The term of office shall be two (2) years and they may stand for reelection.

2. **Nominations and Elections**—Sixty (60) days before the annual meeting, a Nominating Committee of seven (7) members will be appointed by the Executive Board. This Nominating Committee will present a slate of officers to the membership by mail within a period of fourteen (14) days. Thirty (30) days before the annual meeting there will be an open hearing conducted by the Nominating Committee at which any member or members may make additional nominations. A complete list of nominations will be mailed to the general membership not less than twenty (20) days before the annual meeting.

Officers shall be elected at the annual meeting by signed ballots. Members may vote for the election of officers or may vote on a particular issue at a general membership meeting, either in person or by mail, by ballots supplied by the Secretary. Ballots received by mail shall be held by the Secretary and shall not be opened and counted until the time of the meeting. All ballots shall be held for a period of seven (7) days after the date of the meeting to permit examination and challenge by any interested member.

ARTICLE XV

Installation

Installation of officers and Executive Board members shall take place at the general membership meeting in January following the election.

ARTICLE XVI

Guild Meeting

There shall be one (1) general membership meeting each year, and such special meetings as may be called by the Executive Board. There shall be at least one (1) Executive Board meeting each month.

ARTICLE XVII

Quorum

At least twenty-five (25) members must be present to constitute a quorum of the membership in order to hold a meeting and transact business, or 50% of the membership, whichever is lesser.

ARTICLE XVIII

Executive Board

1. The Executive Board shall consist of all officers and shall have general charge and direction of the affairs, property and business of the Guild and the conduct of its affairs.

2. No actions against any employer shall be called until action sanction is secured from the Executive Board of the Guild.

3. Fifty (50%) per cent of the total membership of the Executive Board shall constitute a quorum at any meeting.

4. In the event that any office shall become vacant, a temporary officer shall be elected by the Executive Board. Said temporary officer shall serve until the next general membership meeting.

5. The Executive Board shall have the power and authority to censure, suspend or expel any member of this organization for good cause. The censuring, suspension or expulsion of any member shall require a two-thirds (⅔) vote of the full membership of the Executive Board. Prior to any such action, the accused member shall be given notice in writing of the charges that have been made against him. The accused member shall be given a reasonable opportunity to answer the charges either in person or in writing, request a hearing and present any evidence that he may wish. All hearings on charges shall be held before the Executive Board.

ARTICLE XIX

Committees

1. The President, with the consent and approval of the Executive Board, shall appoint the chairmen of such committees as may be deemed necessary. The chairmen of such committees shall be chosen from the members of the Executive Board. The chairman of each committee shall appoint the members of his committee, and no in-

James H. Sammons, M.D. of Baytown, Tex., Vice-Chairman of the American Medical Association Board of Trustees, was a special guest at the Annual Session. He was the guest speaker at the MSMA General Luncheon and at the Public Affairs Breakfast sponsored by the MSMA Woman's Auxiliary.

terested member of the Guild may be excluded from membership on any committee.

2. The President, with the consent and approval of the Executive Board, shall have power to appoint the chairmen of such ad hoc committees as shall from time to time be deemed advisable. The chairman of the ad hoc committees shall be chosen from the members of the Executive Board. Members of ad hoc committees shall be appointed by the chairman.

3. No officer or chairman of any committee of the Guild shall incur any financial obligation on behalf of the Guild, in excess of One Hundred ($100) Dollars, without first obtaining the consent and approval of the Executive Board. No officer or committee chairman of the Guild shall incur any financial obligations on behalf of the Guild, in excess of Two Thousand ($2,000) Dollars, without first obtaining the consent and approval of a simple majority of members voting at a general or special meeting called for that purpose.

ARTICLE XX

Appeals

1. A member who has been convicted of any offense and who believes his conviction was irregular or unjustified may appeal.

2. A member wishing to appeal from a decision may do so in writing, stating his grounds for such appeal, within thirty (30) days after such decision, after which time no appeal will be allowed. The written appeal is made by presenting it to the President.

3. An appeal from a decision must be taken to the next regular membership meeting of the Guild, or may be postponed until the next following membership meeting by special permission.

4. It shall require a majority vote of the members present at the regular membership meeting to annul or in any way alter the decision.

5. Subject to the provisions of applicable statutes and laws, every member or officer of this Guild against whom charges have been preferred and disciplinary action taken, or who has a grievance, claim or dispute against the Guild or any officer thereof, agrees as a condition of membership or affiliation, and the continuation of membership or affiliation, to exhaust all remedies provided for in the Constitution and Bylaws of this Guild, and further agrees not to file or prosecute any action in any court, tribunal or other agency until those remedies have been exhausted.

ARTICLE XXI

Amendments

This Constitution and Bylaws may be amended by the vote of two thirds (⅔) of the members of the Guild voting at a general or a special meeting called for that purpose. At any such meeting, a member of the Guild may vote in person or by a properly signed proxy. The text of the proposed amendment together with a proxy voting form shall be mailed to the membership at least thirty (30) days prior to the meeting for voting on the amendment.

(Referred to Reference Committee on Resolutions.)

REPORT OF THE COMMISSION ON CONTINUING EDUCATION AND HEALTH MANPOWER

(This report includes all reports of ad hoc committees set up under this Commission.)

The Commission on Continuing Education and Health Manpower appointed three Ad Hoc Committees, as follows: Ad Hoc Committee on Continuing Medical Education; Ad Hoc Committee on Health Manpower; and Ad Hoc Committee—115th Annual Session. The Ad Hoc Committees implemented directives of the MSMA Council and worked closely with allied health services in the study and solution of problems referred. Specific details of each Committee can be found in the individual Ad Hoc Committee Annual Reports published herein.

This year, because of pressure of time to expedite study and answers to meet deadlines, the Commission as a whole or the Chairman, directed MSMA staff to study and research certain projects. Such included (1) approval for joint sponsorship of Hospital Trustees, Administrators and Physicians Institutes to explain the revised Accreditation Standards of the Joint Commission on Accreditation of Hospitals, May 11-13, 1973 (to include Quality Assurance Program for Medical Care in the Hospital, American Hospital Association) and (2) study of comparison with other states of reciprocity licensure.

George H. Ladyman, Chairman
H. Peter Ekern
B. J. Bass
Paul R. Young
Lucien W. Ide
Richard A. Fraser
R. E. Catanzaro
W. Thomas Morgan, Jr.
W. Wayne Boydston
Charles Spears
J. F. McDonnell
A. Sherwood Baker
Edward D. Kinsella
Paul O. Hagemann
Charles A. Worley

REPORT OF THE AD HOC COMMITTEE ON CONTINUING MEDICAL EDUCATION

The Ad Hoc Committee on Continuing Medical Education met three times in 1972. There was an orientation of the Councilor District representatives at the first meeting. Discussions were held concerning the advisability of voluntary versus compulsory systems of CME in Missouri. It was reaffirmed that a voluntary system should be developed.

At its second session, the Ad Hoc Committee and district representatives invited three experts from other states to discuss the role of the State Medical Society in CME. The session was enlightening and stimulating.

A severe ice storm interfered with the third meeting, but several topics referred to the Ad Hoc Committee were discussed and reported to the Council.

The MECO program, in cooperation with the SAMA, has been generally successful. Evaluations have been received from both the community hospitals and the students. These evaluations clearly justify continued support of the program.

The Chairman now feels that the Ad Hoc Committee and the district representatives are in a position to develop a specific plan for CME of members of the Society. It is anticipated that in 1973, it will be ready for presentation to the Council.

Paul R. Young, Chairman
A. Sherwood Baker
George H. Ladyman
W. Wayne Boydston
Robert S. Mosser
Ralph R. Hall
William G. Juergens
Arnold Block
Thomas J. Mitchell

REPORT OF THE AD HOC COMMITTEE ON HEALTH MANPOWER

The Ad Hoc Committee on Health Manpower met in Columbia, held a telephone conference and finalized discussions of the year by letter communication. These were presented to the Missouri State Medical Association Council, approved and received final approval of Missouri State Medical Association at its annual meeting establishing guidelines for the nurse administration of intravenous fluids, medications and blood. Unresolved is the use of intubation, intracardiac injections and defibrillation. However, results of consultation with the involved specialties are available for committee evaluation and recommendation.

The committee was presented the program of and support the Community Based Educational Manpower project in Rural Mid-Missouri.

The committee was represented at Itasca, Ill. on November 9 and 10 at the conference of State Joint Practice Committee sponsored by AMA's National Commission for the study of nursing and nursing education with the findings that many of the presented problems are already under discussion by your committee.

The committee was represented in Jefferson City at the statewide conference of nursing and nursing education on September 19 and 20.

We thank you for your confidence and support.

Charles A. Worley, Chairman
B. J. Bass
A. J. Signorelli
Richardson K. Noback
William C. Allen
Roman E. Hammes

REPORT OF THE AD HOC COMMITTEE 115th ANNUAL SESSION

For the second year in succession, the Committee invited the respective medical specialties to sponsor and develop Scientific Sessions of their own choosing to be included in the MSMA 115th Annual Session on March 29-April 1, 1973 in St. Louis. The Committee is pleased to report the response was very gratifying. A total of twenty-five 90-minute sessions were developed and will be presented, including two General Sessions and two programs presented by voluntary agencies.

The Program Committee invited the medical specialties to also schedule their business and social functions during the MSMA Annual Session. Again, the response was good.

The Committee revised the Scientific Session format as described above, in an effort to promote greater interest and attendance at Scientific Sessions.

The Committee would like to express appreciation to the official representatives serving on the MSMA Commission on Interspecialty Medicine for their cooperation and interest.

Edward D. Kinsella, Chairman
W. Wayne Boydston
Paul R. Young
George H. Ladyman
W. Thomas Morgan, Jr.
Paul O. Hagemann
J. F. McDonnell
John M. Laird, Jr.

(Referred to Reference Committee on Medical Education and Public Welfare.)

REPORT OF THE COMMISSION ON MEDICAL-LEGAL AFFAIRS

Our Commission held three meetings conjointly with the medical-legal committees of the Missouri Association of Osteopathic Physicians & Surgeons and the Missouri Bar Association.

All three parent organizations approved and adopted

(Left to right) Dr. Hubert A. Ritter, St. Louis, and Dr. James H. Sammons are interviewed by Reed Powell on his "morning Affair" TV program which is telecast live from the lobby of the Chase Hotel. Dr. Sammons is Vice-Chairman of the AMA Board of Trustees.

the "National Interprofessional Code for Physicians and Attorneys." This Code sets forth suggested rules of conduct between the two professions. Copies of this Code have been distributed to all members of MSMA and, also, to senior medical students.

The Associations represented also obtained permission from their parent organizations to receive and attempt to resolve complaints arising between physicians and attorneys in their inter-related practice that cannot be resolved at the local level. During 1972, several complaints were handled by our Committee.

We have discussed the preliminary report recently issued by the United States Malpractice Commission. Their main specific recommendations included (1) States should drive the "bad apples" out of medical practice by putting sharper teeth into their licensing laws; (2) States should set up machinery for compulsory but nonbinding arbitration of some malpractice claims; (3) The courts in the states should require a sliding scale contingent fee for malpractice cases; (4) Private interests should draw standby plans for insuring physicians in any area where malpractice coverage becomes unavailable; (5) A broad-base group, not otherwise specified should look into *res ipsa loquitur* and other prickly medical-legal doctrines; (6) A major effort should be made to collect data that might contribute to a better understanding of the medical malpractice process; (7) Health care institutions should intensify their efforts to prevent all types of medical injuries, whether due to negligence or not; (8) Each hospital and other health care institutions should establish a grievance mechanism for dealing meaningfully with patient complaints; (9) Each state should establish a cabinet level office of consumer medical affairs. Most of our members expressed their disappointment in the conclusions of the report. This Commission met for a year and a half and spent $2 million and their main conclusion seems to be that a broad-based group should study the problem. This was the original charge to this Commission.

Our Commission has discussed and studied at great length the use of video tape depositions. Under present Missouri court rules, video tape depositions are considered inadmissible except by agreement between the attorney representing the plaintiff and the attorney representing the defendant. They must agree beforehand to permit the use of video tape depositions in lieu of written depositions. Missouri statutes and Supreme Court rules clearly state that depositions must be reduced to writing. Under Federal Court rules, video tape depositions are now permitted in Federal Courts.

The following arguments were presented for the use of taped depositions:

1. The great convenience to the witnesses especially physicians. 2. These can eliminate prejudicial statements. Improper remarks that could result in a mistrial or a new trial can be removed before the tape is rerun in court. 3. It would allow the judge to reconsider rulings. He would have time to think over objections, and it would give him a second chance to rule. 4. They could prevent continuances of trials due to the absence of witnesses. Attorneys could go ahead and take the video tape testimony. It is always believed that video tape testimony could be obtained more cheaply than written and transcribed depositions. 5. It would insure against loss of testimony. Under the present system, witnesses may be dead or out of state or unavailable when the case is finally tried. Also, expert out-of-state witnesses are presently quite expensive. It is necessary to bring the man to trial and have him wait to give his testimony. If video tape depositions would be allowed, the attorney could go out of state and take the deposition. 6. The present system of written depositions is quite time consuming. It is believed that video tape depositions would allow attorneys more time to prepare for the case. 7. All of the facts and testimony could be recorded when it is still current and fresh in the mind of witnesses. 8. It could prevent the present "circus" atmosphere of courtroom trials. 9. It would help shy or nervous witnesses in presenting their testimony. 10. It could create a layer of "super specialists." Special super lawyers could take video tape depositions from nationally known super specialist witnesses. 11. It could possibly help produce settlements. Both sides would now know the witnesses' remarks before the trial and there would be no gamble on the testimony.

There are few disadvantages as compared to the present system. Some of the disadvantages are:

1. On medical testimomy, a physician testifying in court could help fill in some of the gaps for the jury. 2. While this system may save time for the attorneys, it makes much more work for the judge, court and the jury. 3. The handling of exhibits, especially x-rays, would be more difficult with the use of video tape depositions. 4. Lawyers would need to spend more time developing and proving the credibility of witnesses. With court appearances, the jury can see them and they have more of a person-to-person relationship. It would take a TV personality to come across on a video tape screen. 5. It would be quite difficult to prepare for cross-examination. 6. Trial by screen would be a much duller experience. Verdicts would probably tend to be more in the middle.

Our conjoint Committee has recommended that the question of the usage of video tape depositions be brought to the Missouri Bar Rules Committee and that possibly Missouri Court rules could be changed to allow the use of video tape depositions.

We have recommended that the joint meetings be continued as we believe they are of great assistance to both professions.

Daniel L. Yancey, Chairman
Lee T. Ford, Jr.
Robert V. Tompson
Wilbur P. McDonald
Harold B. Rapp
William R. McPhee
Joseph S. Cope
Jerome I. Simon
Irving H. Clark
Jack R. Eidelman
George P. Wilson
Robert E. Funsch
Frederick J. McCoy
Ned B. Chase, Jr.
Jack S. Sanders

(Referred to Reference Committee on Constitution and Bylaws.)

REPORT OF THE COMMISSION ON INTERSPECIALTY MEDICINE

(This includes all reports of ad hoc committees set up under this Commission.)

The Interspecialty Medicine Commission has had nothing referred to it for action and, therefore, has had no meeting during the past year and has no report to make at this time.

The medical specialties represented on the Commission, however, were invited by the Convention Planning Committee to sponsor Scientific Sessions during the 115th Annual Session on March 29-April 1, 1973. Medical specialties sponsoring one or more sessions included the Missouri State Allergy Association; Missouri Society of Internal Medicine; Missouri Chapter, American Academy of Pediatrics; Missouri Psychiatric Association and Missouri Academy of Psychiatry; Missouri State Surgical Society; Missouri Society of Anesthesiologists; Missouri Ophthalmological Society, Inc.; Missouri Radiological Society; and Missouri Dermatological Society, Inc.

The Ad Hoc Committee for Health Care of the Poor was organized from representatives on the Interspecialty Commission. See report below.

CYRIL J. COSTELLO, Chairman
NORMAN ASEL
JOHN SCHWEISS
TREVOR WATSON
HERBERT E. ROSENBAUM
WALTER C. GRAY
ROBERT M. HAZEN
TRUMAN B. SCHERTZ
EDWIN D. WOLFGRAM
HUGH R. WATERS
FRANCIS X. LIEB
JOSEPH C. PEDEN, JR.
WILLIAM S. COXE
RICHARD E. LORD
WILLIAM T. K. BRYAN
BYRON E. WATTS
WILLIAM STONEMAN, III
MAARTEN NIEUWENHUIZEN
FRANZ STEINBERG

REPORT OF THE AD HOC COMMITTEE FOR HEALTH CARE OF THE POOR

The Ad Hoc Committee for Health Care of the Poor has no further report to present at this time. The committee has kept itself posted as recommended under previous instructions on publications from the AMA Health Committee for Health Care of the Poor.

CYRIL J. COSTELLO, Chairman
R. STACEY LONG
EDWIN D. WOLFGRAM
MARK EAGLETON
RICHARD E. LORD
ROBERT S. MOSSER

(Referred to Reference Committee on Miscellaneous Affairs.)

THE COUNCIL

The Speaker stated that the portions of the reports of Council Meetings which are referred to Reference Committees are preceded by a black square (■) and are concluded with the committee assignment, which is set in bold face type.

Meeting of April 9, 1972

■ Walter T. Gunn, M.D., St. Louis, President, called the meeting to order. Those present were Drs. Gunn; Gerald L. Miller, Kansas City; E. A. Stricker, St. James; John I. Matthews, Jefferson City; Charles R. Gulick, St. Louis; John N. Martin, St. Joseph; Lysle M. Bach, Hannibal; Max S. Franklin, St. Louis; Louis P. Hetlage, Troy; James C. Cope, Columbia; William D. Bradshaw, Clinton; R. Allen Chandler, Kansas City; Howard J. McAlhany, Springfield; Claude W. Cooper, Thayer; Eugene T. Hansbrough, Poplar Bluff; Joseph V. Finnegan, St. Louis; Robert Felix, St. Louis; William D. Mayer and William C. Allen, Columbia; Mrs. Keith D. Jones, Warrensburg; Messrs. Allen D. Smith, Kansas City; Hollister S. Smith, St. Louis; Gary L. Schnedler, Springfield; Edward Hirsch, St. Joseph; John Noble, Kennett; Ray McIntyre, Bob Carroll, Royal O. Cooper and Miss Jean Duensing, Staff, Jefferson City.

Dr. Gunn opened the meeting and asked Dr. Stricker to introduce the new Councilor. Dr. Stricker introduced Dr. Claude W. Cooper, Thayer, as the new Councilor from District 9.

Dr. James C. Cope was nominated and elected Chairman of the Council by unanimous vote and, thereby, became the presiding officer.

Dr. R. Allen Chandler was nominated and unanimously elected Vice-Chairman of the Council. Dr. Charles R. Gulick was nominated and unanimously elected Treasurer, and Dr. John I. Matthews was nominated and elected Secretary by acclamation.

The next meeting of the Council will be held on June 3-4, 1972, at the Ramada Inn, Jefferson City.

PUBLICATION COMMITTEE REPORT

Dr. Joseph V. Finnegan, Editor of the MSMA Journal, MISSOURI MEDICINE, recommended to the Council that the present Publication Committee consisting of Drs. Finnegan, William C. Mixson, Charles S. Sherwin, Byron M. Stuart and Wilfred Wooldridge be reappointed. On motion, duly seconded, the Council agreed that the above members be reappointed to the Publication Committee for a one-year term.

After a brief discussion regarding appointments to the MISSOURI MEDICINE Editorial Board, it was moved and seconded that this matter be tabled until the next Council meeting.

FINANCE COMMITTEE REPORT

Dr. Cope then made the following appointments to the Finance Committee: Drs. Gulick, Gunn, Miller, McAlhany and Cope. He indicated that he would make his appointments to the Communications Committee at the next Council Meeting.

Dr. Cope stated that Blue Shield has compiled a notebook that will be sent to the physicians explaining the various Blue Shield plans and indicating the benefits of each plan. He said that he felt this will be very worthwhile.

The Chairman made the following appointments of Councilor Advisors to the standing Commissions of the MSMA for the year 1972-1973:

Commission on Public Affairs	William D. Bradshaw, M.D.
Commission on Continuing Education and Health Manpower	E. T. Hansbrough, M.D.
Commission on Medical Economics, Third Party Medicine and Governmental Relations	Louis P. Hetlage, M.D.
Commission on Medical-Legal Affairs	Howard J. McAlhany, M.D.

—Referred to Reports of Officers Committee.

HEALTH CARE FOUNDATION

■ Dr. Bradshaw indicated that the MSMA House of Delegates had passed a resolution stating that a current copy of the Constitution and Bylaws of the Health Care Foundation of Missouri, Inc. be sent to all members of the Missouri State Medical Association and that this mailing be undertaken at the direction of the Council of MSMA.

Discussion followed regarding how this mailing might be accomplished. Dr. Miller stated that the Board of HCFM has discussed the possibility of such a mailing, but no definite decision had been made. It was stated that, perhaps, MSMA should await action of the Board of HCFM on this.

After further discussion, Dr. Hansbrough moved that the Health Care Foundation be asked to initiate preparations for mailing a copy of the Constitution and Bylaws of HCF to all members of MSMA with our assistance. Motion was seconded and carried. It was then moved and seconded that the suggestion be made to the Foundation that their Constitution and Bylaws might be published in the July 15, Directory Issue of Missouri Medicine. Motion carried.

The Chairman asked that all motions be written and presented to the Secretary so that they may be recorded properly.

COMPREHENSIVE HEALTH PLANNING

Dr. Hetlage reported that there is a study of emergency medical care facilities now being undertaken in Missouri by a task force of the State Comprehensive Health Planning Agency. He made the following motion concerning this matter: That the Council of MSMA encourage the project undertaken by the State Sub-Task Force on Comprehensive Emergency Services of the Comprehensive Health Planning Agency as recommended by the MSMA Ad Hoc Committee on Emergency Services and that a letter be sent to the Governor and the Chairman of the Commission offering assistance and cooperation of the MSMA in the development of this project. Motion was seconded by Dr. Martin.

Dr. Hetlage stated that this project would be funded with money from HEW. The Illinois Plan was discussed. It was pointed out that there were some problems with that particular plan, but it was felt that the Ad Hoc Committee would recommend a more feasible plan. Dr. Hetlage pointed out that he was not seeking approval of a specific plan, but asking only that the Council encourage this and offer our assistance and cooperation in its development. After further discussion, the above motion made by Dr. Hetlage and duly seconded was accepted by the Council.

Dr. Miller thanked the Council for its support during his year as President of the Association and offered his support and cooperation to the Chairman of the Council for the coming year.

The meeting adjourned at 10 AM and was followed by a short Executive Session to discuss the administrative set-up in the MSMA Office.—**Referred to Resolutions Committee.**

Meeting of June 3-4, 1972

■ James C. Cope, M.D., Columbia, Chairman, called the meeting to order. Those present were Drs. Cope; Walter T. Gunn, St. Louis; E. A. Stricker, St. James; John I. Matthews, Jefferson City; Gerald L. Miller, Kansas City; John N. Martin, St. Louis; Lysle M. Bach, Hannibal; Max S. Franklin, St. Louis; Louis P. Hetlage, Troy; William D. Bradshaw, Clinton; R. Allen Chandler, Kansas City; Howard J. McAlhany, Springfield; Claude W. Cooper, Thayer; Eugene T. Hansbrough, Poplar Bluff; Joseph V. Finnegan, St. Louis; Stanley S. Peterson, Springfield; Arthur W. Neilson, St. Louis; J. Loren Washburn, Versailles; Hector W. Benoit, Jr., Kansas City; William D. Mayer and William C. Allen, Columbia; R. K. Noback, Kansas City; George Thoma, St. Louis; Blaine Z. Hibbard, Kansas City; Paul R. Young, Columbia; Herbert R. Domke, Jefferson City; John S. Spratt and James N. Hueser, Columbia; Mrs. Keith D. Jones, Warrensburg and Mrs. Gerald L. Miller, Kansas City, Woman's Auxiliary; Messrs. John W. Noble, Kennett; Allen D. Smith, Kansas City; Hollister S. Smith, St. Louis; Ray McIntyre, Tom P. Fox, Royal O. Cooper and C. C. Swarens, Jefferson City, Staff.

Chairman Cope called the meeting to order at 9:05 AM and requested approval of the minutes of meetings on April 5 and April 9, 1972. On motion of Dr. Gunn, duly seconded, the minutes were approved as distributed.

Dr. Cope read a letter from a MSMA member requesting use of the addressograph plates for a statewide mailing. He stated that he had answered this letter, indicating MSMA policy regarding use of these plates but stating that if the writer so desired, it would be brought up at this Council meeting. No further request was received. Dr. Hansbrough stated that he felt that when such a request is received from an MSMA member, it should be considered.

REPORT OF THE EXECUTIVE SECRETARY

Mr. McIntyre introduced Mr. C. C. Swarens, new Public Relations Director for the Missouri State Medical Association, who joined the MSMA Staff on June 1.

Mr. McIntyre reported that a letter expressing deep regret at the death of Mr. Edgar Mothershead, former Executive Secretary of St. Louis County Medical Society, was sent to Mrs. Mothershead and had been acknowledged. Thanks also were received for the flowers sent by the Council and Officers to the funeral of Dr. Wendell Scott of St. Louis.

Mr. McIntyre reported that M.D. Day at the University of Missouri will be held on November 17-18. The Missouri Tigers will play Iowa State.

He said that a resolution received from the California Medical Association indicated that the California Medical Association has informed the Regional Medical Program of California that it will not support the funding for financing of HMOs from RMP funds.

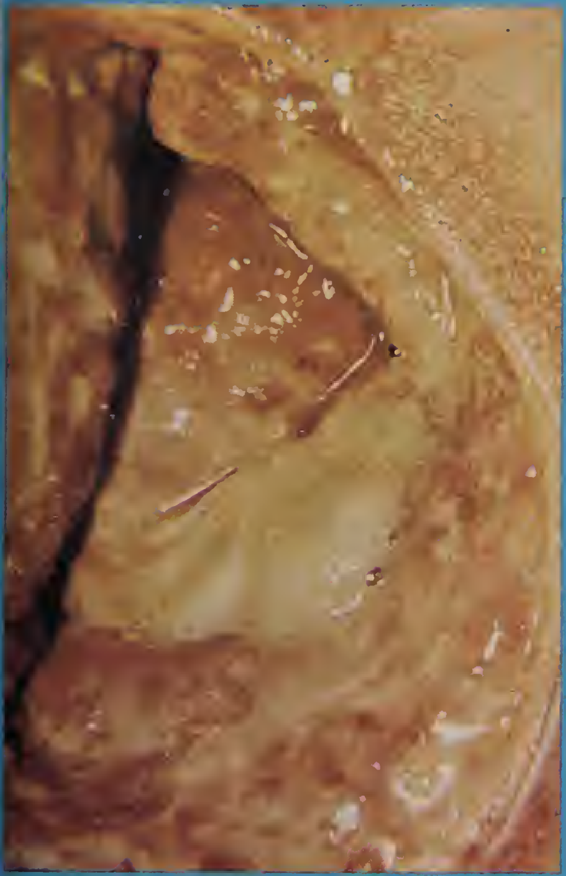
He stated that total registration at the 1972 MSMA Annual Session was 955 with 605 physicians. Dr. Richard E. Palmer, Trustee of the AMA, who attended the Annual Session, called the office after the meeting and indicated that he felt the scientific sessions were very good. The sessions were well attended.—**Referred to Reports of Officers Committee.**

■ Mr. McIntyre reported an evaluation of the conference on "Large and Small Hospital Organization for the 70s." The overall attendance was 300. During the meeting, a questionnaire regarding the content of the conference was circulated. These reports were favorable. On the basis of this and the financial outcome, it is recommended and planned for a similar conference to be held next year on March 1-2, 1973. The Joint Commission on Accreditation is trying to set up workshops for the same people (hospital administrators, chiefs of staffs, board members, etc.). There is the question as to how many meetings can be held in a short period of time for the

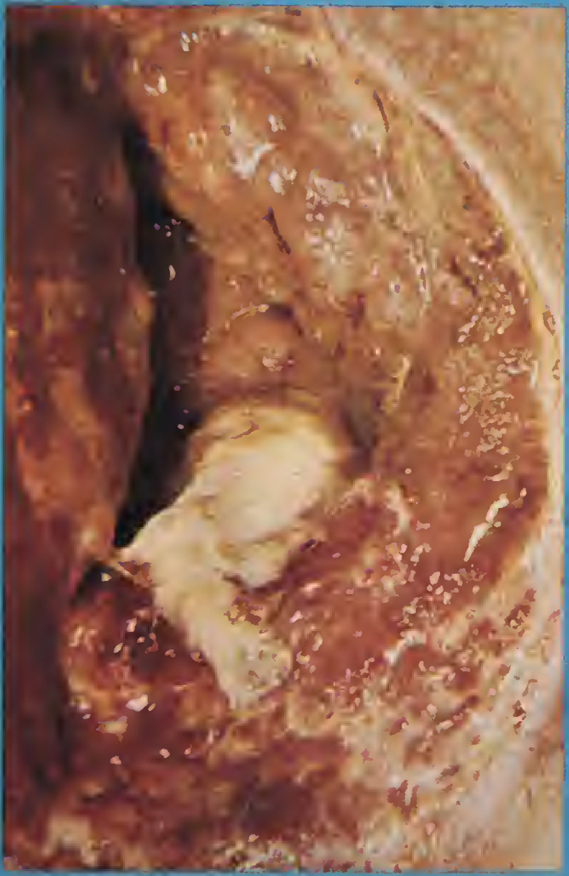
Decubitus Ulcers Yield to

Travase® Ointment

brand of **Sutilains**



Before treatment, necrotic matter coated the inner surfaces of this decubitus ulcer.



After six days of TRAVASE therapy, debridement is nearly complete and granulation evident.

tive Therapy—Observe Its Effects in 48 hours
the recommended nursing technique is
d without deviation, this procedure can
te visible improvement within 48 hours of
ent. If no dissolution of slough occurs by then,
application is unlikely to be rewarding
ck for break in procedure, usually due to use
nsing or antiseptic agents which impair the
veness of the enzyme in TRAVASE).

observation and photos by Kathleen Brough
, M D., Marion County Home, Indianapolis, Ind.

see next page for prescribing information

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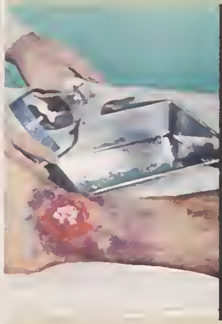
Travase® Ointment brand of Sutilains

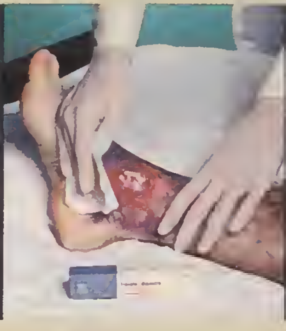
PPLICATION TECHNIQUE: TRAVASE Ointment is indicated as an adjunct o established methods of wound care for biochemical debridement. It dissolves and facilitates the removal of necrotic tissues and purulent xudates.

RAVASE enzymes are selective. Virtually inactive on viable tissue.

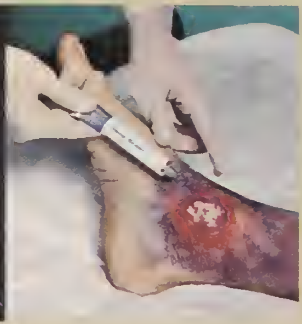
Vhen this recommended nursing technique is followed without deviation, his procedure can generate visible improvement within 48 hours . . .



cer being irrigated) roughly cleanse and gate the wound area using y sterile water or sodium oride solution. Be sure to anse the wound of any iseptics or heavy-metal ibacterial agents which y interfere with the yme activity.

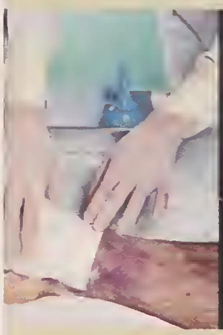


Thoroughly soak the wound area. Where practical, tubbing or showering is suitable. Or wet soaks with gauze pads may be used. Remember to avoid chemical cleansing agents which may interfere with the therapy.

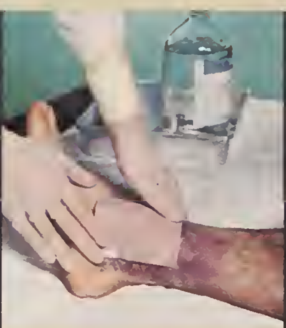


With a sterile cotton swab or finger cot, apply a very thin layer of TRAVASE Ointment. The ointment spreads easily and only a small amount is needed (a small dab of ointment will cover an area as big as the back of a hand).

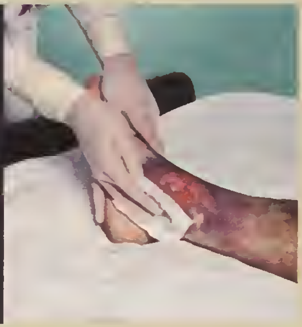
Be sure, though, to rub the ointment well into every crack or crevice of the wound and overlap the surrounding skin one-fourth to one-half inch beyond the area to be debrided—to be sure of complete coverage.



ply loose, wet dressings, roughly soaked in sodium oride solution or sterile ter to the area to be rided only.



Cover the moist dressings with an occlusive wrap (Saran wrap, Telfa Pads, or other plastic wrappings) to keep wound site moist. Do not extend occlusive wrap over ½ inch beyond area to be debrided.



When changing dressing, gently wipe away the dissolved material. Repeat the complete dressing procedure, including application of TRAVASE Ointment, four times daily.

e ulcer shown in these photos is simulated on a model in order to demonstrate e correct TRAVASE application technique.

To: FLINT LABORATORIES
Division of Travenol Laboratories, Inc.
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Street ______________________________

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Please send:

______Additional Information on TRAVASE® Ointment (brand of Sutilains)

______In-service training program

______Comment______________________________

DESCRIPTION: TRAVASE® (brand of sutilains) Ointment is a s preparation of proteolytic enzymes, elaborated by **Bacillus sub** hydrophobic ointment base consisting of 95% white petrolatur polyethylene. One gram of ointment contains approximately 82 units* of proteolytic activity.

ACTION: TRAVASE Ointment selectively digests necrotic soft proteolytic action. It dissolves and facilitates the removal of n tissues and purulent exudates that otherwise impair formation granulation tissue and delay wound healing (4).

At body temperatures these proteolytic enzymes have optimal the pH range from 6.0 to 6.8.

INDICATIONS: For wound debridement (1,2)—TRAVASE Ointn indicated as an adjunct to established methods of wound care biochemical debridement of the following lesions:

Second and third degree burns,
Decubitus ulcers,
Incisional, traumatic, and pyogenic wounds,
Ulcers secondary to peripheral vascular disease.

CONTRAINDICATIONS: Application of TRAVASE (brand of sut Ointment is contraindicated in the following conditions:

Wounds communicating with major body cavities,

Wounds containing exposed major nerves or nervous tiss

Fungating neoplastic ulcers,

Wounds in women of child-bearing potential—because of laboratory evidence of effects of TRAVASE upon the deve

WARNING: Do not permit TRAVASE Ointment to come into cc the eyes. In treatment of burns or lesions about the head or n the ointment inadvertently come into contact with the eyes, th be immediately rinsed with copious amounts of water, prefera

PRECAUTIONS: A moist environment is essential to optimal a enzyme. Enzyme activity may also be impaired by certain age several detergents and antiseptics (benzalkonium chloride, hexachlorophene, iodine, and nitrofurazone) may render the s indifferent to the action of the enzyme (3). Compounds such a containing metallic ions interfere directly with enzyme activity slight degree, whereas neomycin, sulfamylon-streptomycin, ar do not affect enzyme activity. In cases where adjunctive topic has been used and no dissolution of slough occurs after treat TRAVASE Ointment for 24 to 48 hours, further application, be interference by the adjunctive agents, is unlikely to be reward

In cases where there is existent or threatening invasive infect appropriate systemic antibiotic therapy should be instituted c

Although there have been no reports of systemic allergic reac humans, studies have shown that there may be an antibody re humans to absorbed enzyme material.

ADVERSE REACTIONS: Adverse reactions consist of mild, tra paresthesias, bleeding and transient dermatitis. Pain usually controlled by administration of mild analgesics. Side effects enough to warrant discontinuation of therapy occasionally ha

If bleeding or dermatitis occurs as a result of the application (brand of sutilains) Ointment, therapy should be discontinued toxicity has been observed as a result of the topical applicat TRAVASE Ointment.

Dosage and Administration

STRICT ADHERENCE TO THE FOLLOWING IS REQUIRED FC RESULTS OF TREATMENT

1. Thoroughly Cleanse and Irrigate Wound Area with sc or water solutions. Wound **MUST** be cleansed of anti heavy-metal antibacterials which may denature enzy substrate characteristics (e.g., Hexachlorophene, Sil Benzalkonium Chloride, Nitrofurazone, etc.).
2. Thoroughly moisten wound area either through tubbi or wet soaks (e.g., sodium chloride or water solutior
3. Apply TRAVASE Ointment in a thin layer assuring in with necrotic tissue and complete wound coverage e ¼ to ½ inch beyond the area to be debrided.
4. Apply loose wet dressings.
5. Repeat entire procedure 3 to 4 times per day for be

How Supplied

3P3002 TRAVASE Ointment is supplied sterile in one-half (14.2 g.) containing 82,000 casein units of sutilains hydrophobic ointment base.

The ointment must be stored under refrigeration at 2° to 10° (35° to 50° F).

References

1. Garrett, T. A. **Bacillus subtilis** protease, a new agent for Clin. Med. **76:** 11-15, 1969.

2. Hesterberg, R. (Necrosis treatment on fermentative basis) dissertation from the Chirurgical Clinic of the University of Dissertation Printing: Charlotte Schoen, Munich, 1964. (Ger.)

3. Howes, E. L. The healing of the burn may be hindered by therapy. 20th Cong. Soc. Inter. Chir., Rome, Italy, Septembe

4. Prytz, B., Connell, J. F., Jr., and Rousselot, L. M. **Bacillus** protease in the digestion of burn eschar. Clin. Pharmacol. T 347-51, 1966.

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*A casein unit is the amount of enzyme required to produce optical density at 275 mμ as that of a solution of 1.5 mcg. after the enzyme has been incubated with 35 mg. of casein one minute.

FLINT LABORATO
DIVISION OF TRAVENOL LABORATORIES, INC
Morton Grove, Illinois 60053

ame people.—**Referred to Miscellaneous Affairs Committee.**

■ Mr. McIntyre stated that he attended a recent meeting of the Governor's Advisory Council on Comprehensive Health Planning. A number of committee meetings had been held the previous night and reports were presented to the Council. He stated that he felt it would be well for a member of our staff to attend all of these meetings. On motion of Dr. McAlhany, duly seconded, it was agreed that a staff member should attend all Advisory Council meetings.—**Referred to Resolutions Committee.**

PRESIDENT'S REMARKS

■ Dr. Gunn reported that the check which KMOX had received as part of its Journalism Award from MSMA at the 1972 Annual Session was returned to the Association to be used in any manner the Association desired. KMOX was informed that the money would be given to the Missouri State Medical Foundation in the station's name. KCMO donated its Journalism Award check to the University of Missouri-Kansas City. Dr. Gunn announced that the MSMA Honors Graduate Awards and $100 Savings Bonds were awarded this year to the following three medical school graduates: Richard Allen Landy, St. Louis University; Mrs. Charlotte DeCroes Jacobs, Washington University; and Mrs. Jean Edwards Holt, Missouri University-Columbia.

The President reported that the MSMA membership check has been sent to the Association of State Medical Association Presidents. He will attend their meeting on Saturday preceding the AMA Annual Session in San Francisco.

Dr. Gunn reported that the Missouri State Medical Foundation has received a donation of $2,402.74 from the Boone County Medical Society Polio Fund.

President Gunn said that he had sent a telegram of congratulations to Mrs. Prentiss Lee, President of the AMA Woman's Auxiliary, on the occasion of the Auxiliary's 50th Anniversary.—**Referred to Reports of Officers Committee.**

■ Dr. Gunn stated that the Health Commissioner of the City of St. Louis had made application, with the endorsement of St. Louis Medical Society, for assistance through the National Health Services Corps to provide additional physicians to serve patients utilizing Homer G. Phillips Hospital. If there were no objection from the Council, Dr. Gunn would sign the endorsement.

The Wayne Miner Health Center in Kansas City is involved in this same type of program with the approval of the Jackson County Medical Society. These physicians serve in this way in lieu of their military service. The community must demonstrate a real need and the local and state medical societies have to certify the need. These physicians received a straight salary.—**Referred to Medical Education and Public Welfare Committee.**

REPORT OF THE EXECUTIVE COMMITTEE

■ Dr. Gunn, Chairman of the MSMA Executive Committee, reported that the Committee met on May 7 and interviewed applicants for the MSMA staff position opening created by the resignation of Mr. Bob Carroll. Mr. Swarens was employed.

The Executive Committee appointed Drs. Matthews, Cope and Gulick to a Building Committee for the new home of the MSMA.

The Executive Committee also requested staff to research and make recommendations regarding staff personnel policies.

Congressman James W. Symington of Missouri *(left)* and Congressman Tim Lee Carter of Kentucky addressed members of the MSMA at the General Session in the Chase Club on March 30.

On motion of Dr. McAlhany, duly seconded, it was agreed that a Committee of the Council should work with the staff in this regard. The following Councilors were appointed to this Committee: Drs. Matthews, Stricker and Franklin.—**Referred to Reports of Officers Committee.**

REPORT OF LEGAL COUNSEL

■ The Chairman called on Mr. Noble, MSMA Legal Counsel, for a brief report regarding the two law suits in which the Association is involved. He stated that a disappointing decision had been handed down in the Curteman Case. A motion for rehearing has been filed. He stated that the decision deprives the physicians of Missouri of certain rights. Mr. Noble stated that he is hopeful that the Court will rule favorably on the motion for rehearing.

Mr. Noble reported that in connection with the Health Care Foundation suit, motions filed in the case are still pending and answers supporting these motions also have been filed with the Court.

Discussion followed regarding Legal Counsel's presentation. In regard to the Curteman Case, Mr. Noble indicated that the Missouri Supreme Court held that MSMA was not a real party in interest. It was pointed out that the decision rendered was made by a section of the Court and the MSMA has requested that it be reconsidered or that the entire Court consider it.

Dr. Hetlage asked whether or not this decision would place physicians' assistants in jeopardy. Mr. Noble indicated that he thought this might set a precedent.—**Referred to Resolutions Committee.**

REPORT OF DISTRICT COUNCILORS

■ *District #1*—Dr. Martin reported that the Northwest Missouri Medical Society recently held a meeting with Blue Shield representatives present. They discussed their new policy on payment of outpatient charges and how they will pay laboratory charges on outpatients.

Dr. Martin reported difficulties with some of the planned parenthood clinics. He stated that it seems that many girls are going into Kansas City and are getting birth control pills without any examination. He stated that the St. Joseph and Northwest Missouri clinics are not operated that way.

Dr. Martin stated that they have become involved in the MECO Program and feel that it will be a good thing for their area.

He indicated that they are having a problem with the Coroner's job, and could not find an M.D. who wanted to run for the position. However, they now have an M.D. on the ballot.

Dr. Martin expressed concern about the fact that the President of the Illinois Medical Association was in attendance at the MSMA Annual Session and seemingly was unescorted and left on his own. Dr. Cope indicated that if this were the case, he felt it was serious and every effort should be made in the future to be certain that these gentlemen are taken care of.

Mr. Martin reported that North Kansas City Hospital has received applications for staff privileges from two D.O.s. This matter is now pending before the Board.

District #2—Dr. Bach stated that he had no pertinent report at this time.

District #3—Dr. Franklin reported that the Publicity Committee for St. Louis Medical Society has completed a three-year program to indoctrinate the news media. During this period, they have had meetings and round table discussions with presidents, editors and program administrators, editorial page editors, radio announcers, etc. of various radio and TV stations and newspapers. Dr. Franklin stated that he feels their relationship with the media has improved tremendously.

Dr. Franklin reported that he had received many phone calls regarding the mailing of the Division of Health on the new controlled substances law and the requirement for registration. An article has since been published in MISSOURI MEDICINE explaining the background and purpose of this law. This explanation was developed in collaboration with the Division of Health. Dr. Domke stated that the bill in the Legislature received extensive play from the press.—**Referred to Miscellaneous Affairs Committee.**

■ Dr. Franklin indicated that Dr. Benoit went to St. Louis and discussed the Health Care Foundation. Th meeting was sparsely attended due to the number o other meetings and activities that evening.—**Referred t Resolutions Committee.**

■ *District #4*—Dr. Hetlage indicated that his Distric Report does not necessarily represent his opinions, bu those of his Councilor District. Dr. Hetlage reported tha the following action was taken by a committee compose of the majority of delgates from the Fourth Councilo District, all counties being represented, and the pres dents of the various medical societies. There was a 75 attendance at this meeting. The Committee requested th Council to ask the appropriate commission to defin areas of action for those paramedical personnel perform ing certain emergency functions normally carried out b physicians (the Chairman referred this to the Commis sion on Continuing Education and Health Manpower).

The Committee urges passage and implementation of "Good Samaritan Act" which would not only protec physicians, but paramedical personnel rendering emer gency treatment if a physician is unavailable.

Dr. Hetlage stated that a lengthy discussion was hel on compulsory postgraduate education. In summary, th Committee favors the compulsory education as an ult mate goal of the Missouri State Medical Association. was felt that the most practical solution for immediat implementation would be a yearly minimum of hou of postgraduate study as a prerequisite for continuin licensure.

The Committee did not favor examination as a mean to this end. However, it did favor self-evaluation exam inations as a means for continuing education stimulus. I was felt that there should be some reexamination withi a specialty for continued certification, but that thi should be left to the individual discretion of the specialt boards, either on a local or national level.—**Referred t Medical Education and Public Welfare Committee.**

■ Dr. Hetlage reported that a lengthy discussion wa held regarding the relevance of the MSMA and the ap parent lack of interest exhibited by the average gras

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The Woman's Auxiliary to the MSMA held its Annual Convention in conjunction with the MSMA Annual Session on March 29-April 1.

(Left to right, first row) Mrs. Charles R. Willman, St. Joseph, and Mrs. George J. Lytton, Kansas City, were installed as MSMA Auxiliary President and President-Elect for 1973-1974; Mrs. Willman confers with Mrs. Keith D. Jones, Warrensburg, 1972-1973 Auxiliary President; Mrs. J. Loren Washburn, Versailles, Doctors' Day Chairman, with special posters she prepared for the meeting.

(Second row) Mrs. James A. Reid of Marshall, Chairman, presents a membership pin to Mrs. Raymond Bozzo, first sustaining member of MMPAC. Mrs. Bozzo is retiring Treasurer of the MSMA Auxiliary and President of Franklin-Gasconade-Warren County Woman's Auxiliary; Mrs. Willard C. Scrivner of East St. Louis, Ill., President-Elect of the AMA Woman's Auxiliary and a distinguished guest, received a special gift; Mrs. James Gordon of Jefferson City, Chairman, presents the firs annual Missouri State Medical Foundation Award t Mrs. Donald Fakhoury, President of Clay County Au iliary. The plaque was provided by Dr. Paul C. Whit ner, a Past-President of the MSMA and MSMF.

(Third row) Mrs. James R. Nakada, St. Louis County was co-chairman for the convention with Mrs. Willia E. Moore, St. Louis County (not pictured); Mrs. Wil man, Mrs. Lytton and Mrs. Jones; Mrs. E. E. Kin President of St. Louis County Auxiliary, welcomes th guests.

(Fourth row) Mrs. Gerald L. Miller of Kansas City Legislation Chairman, and Mrs. Scrivner; Mrs. Wil man, Mrs. Chester Young, a Director of the AMA Au iliary, Mrs. Scrivner and Mrs. Erle E. Wilkinson, Pres dent of the Woman's Auxiliary to the Southern Medic Association, who spoke at the Installation Luncheo Mrs. Larry Ozenberger, of Plattsburg, AMA-ERF Chai man for the MSMA Auxiliary.

MSMA Auxiliary Holds Annual Convention

DOCTORS' DAY
MARCH 30
1973
Park Plaza

roots member in State Society business. The Committee felt that increased emphasis on the part of the State Medical Society on relevant issues with increased opportunities for participation of members in discussion of these issues is necessary. It also was felt that relevant issues should be discussed and action should be taken on a Councilor District level as well as on a local society level, rather than confine the majority of action and discussion to Council meetings. It also was was felt that even more improvement in dissemination of information on "gut issues" is badly needed.

Dr. Hetlage reported that the second phase of the discussion on the MSMA confined itself to the previously proposed need for a change in the Council structure and in presidential rotation and election. Fourth Councilor District Delegates and all officers of the component societies unanimously favor the changes as outlined in the resolution submitted to the House of Delegates in April.

They further would encourage changes which would permit a more frequent rotation of councilors and would favor changes which would permit the selection of the President from the floor of the House of Delegates, rather than by automatic election of the Council Chairman to that position. A discussion was held relative to proportionate representation, and a resolution to this effect will be presented to the Council at its September meeting.—**Referred to Reports of Officers Committee.**

■ The Committee requests a detailed report of the progress of Dr. Peterson's Committee on Negotiation of Professional Fees and his plans for action within this committee. The Committee has requested his presence or the presence of a member of his committee at a forthcoming Councilor District Conference.

The Committee brought up the matter of the information on the bylaws of the Health Care Foundation and the drug resolution which had not, at that time, been received. This material, however, was received in the mail on June 1.

A motion was made and passed approving on a district level the plan presented by Blue Shield for an open panel comprehensive Blue Shield Program. This program has been developed with wide district consultation through a large and active advisory committee and has been explained in detail to the members of the component societies.

Prior to adjournment, it was decided that the format of the meeting and the content of discussion was better than at any previous meeting of this type and that these meetings would be continued on a regular basis on the Wednesday prior to the Council meetings. It was suggested that $1.00 per member assessment be paid by the component societies to pay the expenses of this conference. This is to be considered by the component county societies and action is to be taken by them voluntarily, if they so desire.—**Referred to Resolutions Committee.**

■ Dr. Hetlage brought up the matter of the resolution which was passed in the House regarding the failure rate of the state boards, particularly for foreign physicians. He indicated that it was his understanding that one third of the foreign physicians taking the Missouri State Boards do not pass them.

Dr. Mayer indicated that the FLEX examination which was put together by a national board and is in use in some states could enhance the present problem when Missouri goes to this examination. The failure rate of the FLEX examination across the country is high.—**Referre to Medical Education and Public Welfare Committee.**

■ Dr. Hetlage reported briefly on the planned parenthood clinics in St. Charles. With a grant from HEW they came to several gynecologists and said they wer going to start a planned parenthood clinic. They wer told that if the local physicians did not help them, the would bring doctors from St. Louis County to run i The biggest objection to these clinics is their use of nor professional social workers who go out and solic business. Dr. Hetlage indicated that they have take testimony from several people regarding the clinic goin into private hospitals and soliciting patients. It is costin this particular clinic $40 per patient to treat then There is objection to the means by which the clinic wa established by coercion. A representative from HE has been asked for his plans for this particular clini Seemingly, they plan to go into all GYN and OB ca and, if necessary, to enlarge into total medical car Dr. Domke indicated that there has been substanti federal money appropriated for planned parenthood.

Dr. Hetlage reported that Lincoln County has son objections to the manner in which the County Healt Nurse is operating. She is hired by the County Cour In some instances, she is prescribing INH following positive Tine Test. He said that oral polio clinics an measles clinics are being held within three weeks each other.

Several of the Councilors indicated that the topic planned parenthood clinics will be brought up in the reports and it was agreed that this matter be table until all Councilor District reports were made.—**Referre to Miscellaneous Affairs Committee.**

■ *District #5*—Dr. Cope indicated they had two cas reviewed by the Health Care Foundation, both Med care cases. The Foundation decided in favor of the ph sician in both instances. The effect on the carrier wa in one instance, no response. In the other case, a sizab increase in the amount was allowed on the basis of mistake by the carrier in its computer programming. D Cope indicated that if the HCF is going to be a on way street, it isn't going to lead very far. He indicate this was given to the Council only for their informatio

Dr. Cope reported on what he considers a very serio situation taking place on his district and probably oth parts of the state and country. The Boonville Medic Group has a policy of requiring payment before ar Medicare forms are filled out. This policy is spelled o and posted on the office wall. The patients are told th they do not accept assignment. One particular patie accepted treatment under these circumstances. He r ceived a bill from the clinic stating so much for medic care, so much for laboratory services, etc. He took th statement to the SSA office in Sedalia and they indicat to him that the statement was not adequately itemiz for their use. The Boonville Medical Group was inform that they were in violation and any patient must given the equivalent of an unassigned Medicare for Dr. Cope submitted a report regarding this to the Med care carrier with a copy going to the AMA. In essenc the AMA agreed with the position that the Group w in violation of the AMA recommendations if they d not give an adequately itemized statement to the patier so that he can collect from Medicare. It was Dr. Cop opinion that this is pressure that SSA is putting on ph sicians to take assignment.

Mr. Smith reported that this had come up in Jackson ounty. He indicated that he did research on AMA ac-ities in this regard. He stated that the original Medi-re regulations required that the patient pay his bill d then be given a receipted statement to use to ceive Medicare payment.

Mr. Smith indicated that at that time, the AMA felt is was not right, since many patients could not pos-bly pay their bills prior to receipt of the payment from edicare and the AMA asked for the change. Mr. Smith ated that he felt this is well substantiated by the AMA.

The Chairman referred the Boonville Medical Group atter to the Standing Commission on Medical Eco-mics, Third Party Medicine and Governmental Rela-ns which is chaired by Dr. Peterson.—**Referred to Res-utions Committee.**

District #6—Dr. Bradshaw reported that the Golden alley Memorial Hospital has opened. It is a 100-bed ospital and serves about 107 patients all the time.

Dr. Bradshaw discussed the medical manpower prob-m in the state and indicated that we have tried to take me leadership in this problem. There are now young eople practicing in the state who are on federal pay-lls. He indicated that many rural Missouri towns that e badly in need of physicians do not have the back-round information and do not know how to go about etting such physician manpower. He stated that he is ure many of these physicians are meeting real needs, ut many of them have not. Dr. Bradshaw feels that here should be someone to determine where the needs re and that, perhaps, the MSMA Council or the Divi-ion of Health or both might serve as a clearing agency determine the manpower needs.—**Referred to Medical ducation and Public Welfare Committee.**

■ Dr. Bradshaw expressed his concern regarding help-ng individuals who have been arrested on drug addic-ion charges or for sale of drugs. Many times, they pend many months in jail. It is the contention of some awyers that if the case is drawn out long enough, the harges will be reduced or possibly dropped. When the ddict does get out of jail, he finds that jobs are difficult o get and he has no visible means for paying his attor-ey's fees. In many instances, he turns back to the sale f drugs to aid his financial situation. Perhaps some hange should be made in the legal procedure so that rompt action can be taken. Dr. Bradshaw indicated that e feels that our system is perpetuating such problems nd stated that he feels this is part of the medical com-unity's concern.—**Referred to Miscellaneous Affairs ommittee.**

■ Dr. Bradshaw brought up the matter of M.D.s and D.O.s practicing together. He stated that a group of D.O.s in his locality have approached several M.D.s ver the state about coming and practicing with them. He said that there is one M.D. practicing on the staff f this group now. He indicated that he would like to ear reflective thinking from the Council members re-garding such an arrangement.

Dr. Bradshaw reported that a joint meeting of the Henry, Johnson, Pettis, Lafayette-Ray and Saline Coun-ty Medical Societies was held on Wednesday, May 31, in Sedalia and was well attended. Three physicians from the University of Missouri presented the program re-garding some of the recent innovations at the University and held a question and answer period. He said that it was very enjoyable meeting.—**Referred to Medical Education and Public Welfare Committee.**

■ Dr. Bradshaw indicated that they too have the family planning clinic in the community and he is one of the physicians who is trying to help them.—**Referred to Miscellaneous Affairs Committee.**

■ Dr. Bradshaw stated that he would like to see the Health Care Foundation be expanded into doing hospital review. He stated that he feels the need for his particular hospital to have a total review by some outside and disinterested party. He said that possibly this could be done for small hospitals of less than 150 beds or, perhaps, on a staff-size basis and he would like to see the Foundation do such a review on a request basis. —**Referred to Resolutions Committee.**

■ Dr. Bradshaw reported that a physician who is a conscientious objector will be spending his service time working with him beginning July 1. He said the physician seems to be a very bright young man and he is happy to have him.

District #7—Dr. Chandler reported that the Kansas City Bar Association, Jackson County Osteopathic Association and the Jackson County Medical Society have completed work on a detailed interprofessional code.

Jackson County Medical Society sponsored a dinner meeting at which Dr. Russell Roth, Speaker of the AMA House of Delegates, was the spokesman. Four AMA Delegates were present; two were from Kansas. There was a question and answer period.

Dr. Chandler called attention to an article from the *Kansas City Times* headlined, "Expense Account." This article spoke of organized tours as being only a tax dodge unless more actual medical papers are presented.

He reported that Dr. George Lytton has been elected President of the Urban League in Kansas City.

District #8—Dr. McAlhany reported that Dr. E. A. Hoffman, President-Elect of the AMA, will visit in Springfield on November 16. During the day, he will be at Drury College and he will be the guest of Greene County Medical Society in the evening. This event probably will be held at the Howard Johnson Convention Center with a social hour at 6 PM or 6:30 PM. He urged the Council members and officers to make every effort to attend and indicated that more detailed information will be supplied at a later date. He did state that this meeting conflicts with the Caribbean Cruise which is being sponsored by MSMA.

District #9—Dr. Cooper indicated that the main problem in his area is still manpower shortages.—**Referred to Medical Education and Public Welfare Committee.**

■ *District #10*—Dr. Hansbrough reported that their local extended care facility, which is the Lucy Lee Annex, had come under a great deal of fire by Blue Cross of St. Louis. He stated that he had sent a patient to this ECF for rehabilitation following hospitalization with a fractured hip. She remained there for only nine days and was told that was as long as she could stay. Dr. Hansbrough communicated with Rep. Burlison regarding this situation and he has now received a letter which opens the door and the ECF will accept almost anybody.

Dr. Hansbrough indicated that the Department of Health provided him with the National Health Services applications. There are two physicians being assigned to

New Madrid under this program. They had three physicians, but all have left. Two have gone into practice in Cape Girardeau. He said their reason for leaving was due to the inadequate fees being paid under Medicaid. He stated that he feels this bill was written to see that indigent people do receive adequate medical care. He said that he felt the Council should determine if anything can be done about these fees. He stated that the community has to apply for these physicians. They come through the Regional Offices of HEW. Ordinarily, these physicians are assigned to communities of less than 4,000 population, although exceptions will be made in extreme cases of isolation, etc. The state and local medical societies have to certify the need as well as the local government. Other health organizations are encouraged to comment.

Dr. Hansbrough reported that Lilbourn, a community of less than 1,000 population in his district, is served by one D.O. and has applied for a federal HMO. It was approved by the Bootheel Comprehensive Health Planning Agency by a vote of 6-4 with some abstaining. He stated that he understands that this did not receive later approval. It has a budget of $373,320. No physician was written into the budget. He stated that he is under the impression that this was not community-oriented, but that it came down from the federal government that this is a good place to try one of these.

Dr. Hansbrough expressed concern that people in rural areas should be educated to the fact that with today's modes of transportation, one does not necessarily have to have a physician in town as long as there is one within a reasonable distance. He indicated that he felt transportation might be the problem rather than physician location.

Dr. Hansbrough indicated that he had sent 51 Medicaid case reports from his clinic to the Health Care Foundation for review. The Fifth Region of the HCF review them and they received 100% approval. He stated that he hopes the HCF will transmit this information to the Division of Welfare. He said that he is concerned over the fact that 35% of the cases have been in favor of the physician and 65% in favor of the carrier.

Dr. Hansbrough cited a case of a physician in his area whose last check from Medicaid was in the amount of $1.90. He contended that it would be cheaper to treat the patient at no charge than to fill out the Medicaid forms.—**Referred to Resolutions Committee.**

■ Dr. Hansbrough stated that they do have some ter ribly strong reactions toward the Constitution and Bylaw change regarding referendum that will be voted on a the next meeting. He indicated that if the metropolita areas would get together, they would be able to cal for a statewide referendum. Dr. Hetlage stated that St Louis County Medical Society is worried about it, also **—Referred to Constitution and Bylaws Committee.**

■ Dr. Hansbrough reported that there is a planne parenthood clinic operating out of the Butler Count Health Department. It is being run by one of the loca GYN's, Dr. Carlson. He indicated that they feel it is problem, and the physicians are trying to help in th situation. He stated that it is costing them $67 per pa tient. They will not do therapy there. The doctors fee that there is a certain number of people who can b reached through this clinic who will not come to th physician's office or who cannot get funding anywher else. He stated that Dr. Carlson is running for the Coun ty Health Board. If elected, he will be on the decision making end of the Board. Dr. Hansbrough reiterated th feeling that physicians must become involved in thes planned parenthood clinics.

Dr. Hansbrough indicated to the Council that he fee it should go on record, following all of the other group with the exception of the TB Society, as condemnin the use of the portable X-ray unit.—**Referred to Mis cellaneous Affairs Committee.**

■ Speaking to Dr. Bradshaw's problem regarding M.D and D.O.s, Dr. Hansbrough stated that he felt that th group needs a very strong physician. If they had one, h could see no reason why this group could not be compose of M.D.s and D.O.s. He said that you must get th right, strong personality, and he will update the grou **—Referred to Medical Education and Public Welfar Committee.**

■ Regarding the possible hospital review by the HC he stated that the JCAH has a fine mechanism for sel evaluation. He indicated that he felt the idea of th HCF doing hospital review is a good one, but state that manpower will be a problem.—**Referred to Resol tions Committee.**

■ This concluded the Councilor District Reports.

The Chairman pointed out that the following iten were brought out in the Councilors' report and woul

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The Annual President's Banquet on March 31 was a highlight of the Annual Session. The Honorable William C. Phelps, Lieutenant Governor of Missouri was the guest speaker.

(Left to right, first row) President E. A. Stricker spoke briefly after accepting the President's gavel from retiring President Walter T. Gunn; Dr. Gunn accepts a plaque of appreciation from Dr. Stricker and the MSMA; Lt. Gov. William C. Phelps.

(Second row) Dr. and Mrs. Billy J. Bass, Salem; Mrs. Erle E. Wilkinson, President of the Woman's Auxiliary to the Southern Medical Association with Mrs. Willard C. Scrivner, President-Elect of the AMA Auxiliary and Mrs. Frank R. Bradley, St. Louis; Mrs. Arthur W. Neilson and Dr. Neilson, MSMA Delegate to the AMA.

(Third row) Dr. and Mrs. Charles E. Nickson, J Independence; Dr. Truman B. Schertz, MSMA Vic President and Mrs. Schertz, North Kansas City, and D and Mrs. William R. McPhee, Kansas City; Dr. Paul Whitener, a Past-President of the MSMA and Mr Whitener, St. Ann.

(Fourth row) MSMA Past-President Gerald L. Mill and Mrs. Miller, Kansas City; Allen D. Smith, Executi Secretary of Jackson County Medical Society, with Mr Smith and Mrs. George J. Lytton and Dr. Lytton, Ka sas City; Mrs. Stanley S. Peterson and Dr. Peterso MSMA Delegate to the AMA.

The Annual President's Banquet

now be further discussed by the Council:

1. Planned Parenthood Clinics
2. Central Clearing Agency for Health Manpower
3. Peer Review—Extending to Hospitals by HCF
4. Fees under Medicaid
5. Education concerning traveling to the doctor's office rather than trying to get a doctor in every community
6. Constitution and Bylaws Change
7. TB Unit
8. Problem of D.O.s and M.D.s on same staff
9. Legal provisions on drug abuse problem.

PLANNED PARENTHOOD

Dr. Hetlage stated that they certainly favor these clinics as they feel the clinics reach people who would otherwise not come into private offices and that this is an important medical problem. He indicated that local control is necessary and the clinics are being pressed beyond what the local doctors want them to do. He stated that they have written a letter suggesting an advisory board of four GYN's who would review the operation of the clinics.

Dr. Martin indicated that the family planning clinics in his area are through the Family Guidance Clinic under the United Fund. The family planning part is run by the GYN's. He stated that this seems to be an ideal situation and is well controlled.

Dr. Chandler indicated that he would like more background information on this, such as where does the money come from, is this a statewide agency under one central office; etc.

Dr. Cope asked that rather than go into background at this time, that this be a staff function, and at the next meeting, the Council will have a more comprehensive, factual background on family planning activities.

Dr. Bradshaw then moved that an Ad Hoc Committee of this Council be appointed to investigate and make recommendations concerning family planning activities. The motion was seconded by Dr. Hetlage and carried.

Dr. Stricker indicated that there is a planned parenthood clinic in this area and that he was approached recently, indicating that the clinic had instructions to extend their services to diagnosis and treatment of VD. He said that the doctors did not go along with any treatment except that in the physicians' offices. The clinic will pay the physician and collect from the patient on the basis of his ability to pay. The physician will be paid in full provided that the clinic makes the appointment with the doctor.

Dr. Cope stated that Staff will get all the information they can on this subject and an Ad Hoc committee will be appointed.—**Referred to Miscellaneous Affairs Committee.**

HEALTH MANPOWER

■ The next item discussed was the National Health Service Corps and the need for health manpower within the state. It was indicated that a statement of need signed by the state and local medical societies is required before a community can receive a physician through the National Health Service Corps. It was suggested that, perhaps, it would be well if there were a central clearing agency to help in the process of placement of physicians.

Dr. Domke pointed out that approximately a year and a half ago, the Division of Health, in cooperation with MSMA and MAOPS, set up a Physician Placement Cc ordinating Committee. This committee is in the proces of obtaining physician distribution data from the Stat Board of Registration for the Healing Arts. Within few weeks, it should have up-to-date information o physician distribution in the state.

Dr. Bradshaw stated that he thought there is nee for a central clearing agency. He also suggested tha a system of priorities should be set up. Dr. Domk pointed out that perhaps the data received by the Phy sician Placement Coordinating Committee can produc information that will help in the development of guid lines.

Dr. Bradshaw moved that the Physician Placemer Coordinating Committee accumulate data and make available to the Council and that the Council take pos tive steps toward developing a criterion for priority sy tems of physician placement in Missouri. The motio was seconded and carried.—**Referred to Medical Educa tion and Public Welfare Committee.**

TOTAL HOSPITAL REVIEW

■ Dr. Bradshaw expressed concern over the fact th small hospitals with small staffs are probably incapabl of effective peer review. He indicated that many Mi souri hospitals need outside medical input and he woul like to see the Health Care Foundation expand the activities to involve complete hospital review.

Dr. Benoit indicated that the HCF Board of Directo would meet on Sunday afternoon and he would brin this matter up at that time. Dr. Benoit stated that pe haps the Foundation could act as a back-up group t utilization review committees in hospitals. Dr. Beno indicated that this would be on a voluntary basis. Eac hospital would have to request a review. There wa discussion regarding at what given intervals this revie should be done if the Foundation agreed to hospit review.

Dr. Miller moved to pass the feeling of this grou on to the HCF Board and await their reply. The motio was duly seconded and carried.

FEES UNDER MEDICAID

During a Councilor District report, the matter fees under Medicaid was discussed. After discussion, was decided that staff should get information on th subject and that this matter will be on the agenda f the next Council meeting. The Ad Hoc Committee o Negotiation of Professional Fees will look into this ma ter.—**Referred to Resolutions Committee.**

PUBLIC EDUCATION ON PHYSICIAN AVAILABILITY

■ There is a need to educate the public to the fact th it is not miles, but time that is important in obtainin medical care. It is not necessary for a community have a physician, but only for a physician to be the immediate vicinity.—**Referred to Medical Educati and Public Welfare Committee.**

CHANGE IN CONSTITUTION & BYLAWS REGARDING REFERENDUM

■ There was discussion on the change in the Constituti & Bylaws regarding referendum. It was noted that the was opposition to this. It was pointed out that if t Councilors are not in agreement with this change, th should make their opposition known to their respecti legates and their delegates can vote accordingly when is issue comes up for approval at the 1973 House of legates. It was agreed that this matter should be iced on the agenda for the January Council meeting. **Referred to Constitution and Bylaws Committee.**

PORTABLE X-RAY UNITS

The matter of using portable X-ray units in the de- tion of tuberculosis was discussed. It was agreed to fer this matter to an existing committee or commission study and recommendations. This matter was re- rred to the Commission on Public Affairs.—**Referred to iscellaneous Affairs Committee.**

M.D.-D.O. ASSOCIATION IN GROUP PRACTICE

There was discussion regarding problems involved in e association of M.D.s and D.O.s in partnerships. Dr. etlage stated that in checking the insurance problem in- lved in M.D.-D.O. partnerships, some insurance com- nies will not insure such a partnership. He said that had been his experience in his area that when there d been cooperation between M.D.s and D.O.s, the re of patients had been upgraded. Dr. Miller indicated at the AMA had had some discussion on this subject d he thought there was some decision made at a cent meeting. Dr. Benoit indicated that he remembered at there had been a great deal of dialogue on this bject, but he did not recall that any action had been ken. Dr. Cope asked the Staff check into this and give e Council an answer.—**Referred to Medical Education d Public Welfare Committee.**

REPORT OF WOMAN'S AUXILIARY

Mrs. Jones thanked the Council for inviting her to the eeting and said that it had been very interesting. Mrs. nes reported that approximately 120 women had at- nded the Woman's Auxiliary Day at the Legislature d that seven Senators from the Public Health Commit- e had attended the luncheon. She stated that she hoped at the women would become better informed on poli- s. She reported that the Auxiliary is already planning legislative day for next year and she hopes that it will able to entertain all members of the Legislature and, rhaps, have the Governor address them.

Mrs. Jones reported that two regional workshops had en held in Kansas City and St. Charles and both had en well attended by the officers. She expressed the pe that more members will attend the next workshop. ne also reported that the circulation manager for *Mis- uri Doctor's Wife* had advised her that the Auxiliary w has a master list of members and will not need to e the MSMA addressograph equipment.

Mrs. Jones reported on the Fall Conference of the oman's Auxiliary which will be held on October 24-25 the Ramada Inn in Columbia. This conference will e held in conjunction with the Fifth Councilor District eeting. She stated that there will be a benefit dinner r the Missouri State Medical Foundation on the first ening. On the second day, the Auxiliary plans a Health ducation Day. Mrs. Jones asked for Council support by -sponsoring this and, perhaps, an Ad Hoc committee ould be appointed to assist the Auxiliary. She also in- icated that the Auxiliary may need minor financial sup- ort.

Mrs. Jones thanked Dr. Gunn for sending a telegram ongratulating the AMA Auxiliary on its 50th Anniver- ry. Mrs. Jones invited all wives attending the AMA Annual Session in San Francisco to a breakfast on June 19. Mrs. Jones introduced Mrs. Irene Miller, Legislation Chairman for the Woman's Auxiliary.

Dr. James C. Cope *(left)*, **MSMA President-Elect for 1973-1974, congratulates Dr. Donald Judd of St. Louis who was elected as Treasurer of the MSMA for the coming year. Dr. Judd is President of St. Louis Medical Society.**

Dr. McAlhany moved acceptance of the report with commendation. Dr. Cope indicated that in accepting the report, the Council also is directing the appointment of the ad hoc committee requested by Mrs. Jones. The motion was seconded and carried.

APPOINTMENT OF COUNCIL COMMITTEE

Dr. Cope appointed Drs. Franklin, McAlhany, Hansbrough and Cooper to serve on the Council Committee on Membership Communications.—**Referred to Reports of Officers Committee.**

SELF-TESTING PROGRAM FOR LABORATORIES

■ Dr. Blaine Hibbard, Kansas City internist, reported to the Council on the recently-developed program for self-evaluation of laboratory services known as a Proficiency Evaluation Program (PEP). This is a voluntary program sponsored by the American Society of Internal Medicine and the College of American Pathologists and has been developed for the quality control of physician's office laboratories.

This program provides a confidential data to assist physicians in evaluating the performance of their own laboratories. Test materials and instructions are sent to the physician four times a year. Test results obtained by the physician's laboratory staff are sent to an impartial computer processing center. These results are compared to the performance of the participating office laboratories and reference laboratories for the same tests. A confidential report is sent to the physician. Dr. Hibbard stated that this testing program can assure the physician that what he is doing in his own laboratory is of high quality. He indicated that he felt there is a good chance that some of the third party carriers will require some measure of proficiency evaluation if they are going to pay for it.

Dr. Hibbard asked the Council's endorsement of this program and indicated that he would like to write an article recommending this type of program to appear in Missouri Medicine. Motion was made and seconded that the Council accept endorsement of this program. The motion carried.

REPORTS OF THE MEDICAL SCHOOL DEANS

Dr. William Mayer reported that on May 16, the University of Missouri School of Medicine-Columbia graduated 98 new M.D.s, the largest graduating class in its history. There will be 110 incoming students in September: 102 Missourians out of 570 Missouri applicants and eight out-of-state students out of 970 applicants. The Board of Curators recently passed a resolution indicating that it would be appropriate for the professional schools to accept approximately 10% out-of-state students in their classes.

Dr. Mayer stated that he and other members of his staff have been invited and have participated in various county medical society and district meetings and indicated that he appreciates these opportunities to become involved in organized medicine.

Dr. Noback reported that the University of Missouri-Kansas City will have 72 new students this year. He said that the initial two years has pointed out that the combined Arts and Sciences medical school program works well. The docent program also is working well. He stated that they have been working with Dr. Jack Stelmach and will have family practice preceptorships this summer.

Dr. Noback indicated that people have been impressed by the curriculum book which has been assembled.

Dr. Thoma indicated that Dr. Felix will not retire this year since his time was extended by the St. Louis University Board of Trustees.

He stated that St. Louis University graduated 117 medical students recently. For the coming September class, they have had 5,400 applicants and are accepting 154 students. He stated that the Dean of Admissions estimated that about 600 applicants with a grade point average of 3 or better cannot be accepted because of lack of space. He said this is regrettable. St. Louis University has accepted between ten to 15 disadvantaged minority students. Almost all do not meet the standards, so a bridging course has been developed for the summer to try to bring these students up to the standard.

Dr. Thoma reported that for the past year they have had a Blue Print Committee studying how to teach comprehensive ambulatory care. There will be a final report of this committee, and he indicated that he would be glad to share it with anyone interested.

Dr. Thoma reported that ground has been broken for the $15 million modernization and expansion program of the University Hospital basically for ancillary services.

It was pointed out by a Councilor that Washington University has rarely been represented at Council meetings.—**Referred to Medical Education and Public Welfare Committee.**

MATTERS REFERRED TO THE COUNCIL BY THE 1972 HOUSE OF DELEGATES

■ *Resolution #25—Smallpox Vaccination*—Dr. Domke reported that a committee of the Division of Health is presently being formed in the field of communicable diseases. He stated that the MSMA will have representation on this committee and this particular matter will be one which the committee will discuss.

On motion of Dr. Miller, duly seconded, it was agree that this matter be tabled until the Division of Healt Committee on Communicable Diseases is formed an functioning.

Resolution #33—Pediatric Coordination Council *Missouri*—The Chairman referred this resolution to th Commission on Public Affairs.

Resolution #35—Restrict Usage of Amphetamines an *Resolution #39—Foundation Bylaws to Membership*- It was reported that a pledge card regarding the am phetamines and a copy of the Constitution and Bylaw of the Health Care Foundation have been sent to th membership of MSMA.

Resolution #37—Emergency Services in Kansas City- The Chairman indicated that a copy of this resolutio had been forwarded to Mr. Allen Smith. Dr. Miller i dicated that the resolved portion states, "That MSM cooperate in whatever manner is deemed advisable b our Officers and Council." He stated that the MSMA h been active in this field for several years. He suggeste that all information on MSMA efforts in this field shoul be passed on to Mr. Smith, so that not only MSMA efforts for the Kansas City plan, but statewide effor regarding emergency services should be made known.

Mr. McIntyre stated that he had talked with D Bowles who said that he is in the process of naming h Ad Hoc Committees and Dr. Klippel again will named as Chairman of the Ad Hoc Committee on Eme gency Medical Services and will continue this progra He also stated that there will be a statewide meeti on emergency medical care services in Jefferson City August. This is a federally-funded program under CH

Dr. McAlhany stated that the city of Springfield h appropriated $600 to make five or six tapes to help D Cook work with the ambulance personnel. There is su a rapid turnover.

Dr. Thoma reported that the Bi-State RMP, acting f a separate corporation with which Drs. Klippel and Co rad are involved, has applied for a federal contract emergency services in the metropolitan areas. He i dicated that St. Louis is to be site visited in the ne future to see if they will be funded.

Dr. Cope indicated that the resolution asked that t MSMA cooperate and stated that we certainly will n discontinue our efforts statewide.—**Referred to Misc laneous Affairs Committee.**

■ *Resolution #40—Failure Rate of State Board Exa inations*—The Chairman referred this resolution to t Commission on Continuing Education and Health Ma power.—**Referred to Medical Education and Public W fare Committee.**

■ *Resolution #41* was discussed. This resolution resolv that, "The Health Care Foundation of Missouri, Inc., w not review any issue unless the parties requesting t review agree to be bound by the decision of the HCF with the privilege of appeal." A copy of this resoluti has been forwarded to the Health Care Foundation. **Referred to Resolutions Committee.**

■ Dr. Miller indicated that he had received various co ments on the pledge cards regarding restriction of a phetamine usage. He said that many physicians do realize that this is a problem and cannot understand w they should be challenged. Dr. Cope indicated that will turn this problem over to the new MSMA Pub Relations Director.—**Referred to Miscellaneous Affa Committee.**

REPORT OF THE AMA DELEGATE

Dr. Neilson reported to the Council on activities of e upcoming San Francisco meeting. He indicated that will prepare a resolution regarding the death of Dr. endell Scott to be presented on the floor of the House. ie Delegation will work for the reelection of Dr. Ver- n Wilson to the Council on Medical Education. He ited that they would be ready to take part in the honor hich the AMA will bestow on Dr. Durward Hall. The SMA delegation will present two resolutions. Dr. Neil- n indicated that both he and Dr. Benoit will chair ref- ence committees.

Dr. Neilson indicated that during the last several years, ere has been a change in the attitude of physicians ward the AMA and, in a sense, toward the delegates. me physicians do not feel that their delegates truly present them. He stated that he felt the MSMA delega- n has tried to represent Missouri medicine and to take the AMA those thoughts which the House and the uncil have expressed. He said there has been an in- easing cry about the lack of "grass roots" physicians' fluence on "The Establishment." Dr. Neilson stated at there will be an airing of some of these problems at e San Francisco meeting. He stated that "as delegates, e need instruction from this body." The AMA House of elegates will be confronted with serious proposals to ange the rules and to make association policies and ograms more responsive to the needs and demands of e grass root membership. The following items will un- ubtedly receive airing at the San Francisco meeting:

The State Medical Society of Wisconsin, at the 1971 MA Clinical Meeting, pressed the House to order pub- c hearings by the Council on Long Range Planning and evelopment so that physicians throughout the country uld air criticism of AMA structure, programs and pol- ies. Dr. Neilson indicated that he had written to mem- ers of the MSMA Council and the delegates to deter- ine whether they wished the MSMA delegation to ap- ear as witnesses at the hearing and what they wished to e presented.

The Harris County Medical Society at Houston, Tex., as voted to support a constitutional convention and to shape the AMA and to rededicate it to the private prac- ce of medicine.

The Colorado delegation to the AMA House has been irected to urge action to effect a significant revision of e internal organization structure of the AMA.

Michigan State Medical Society has adopted a resolu- on asking for reassessment of AMA structure, function nd purpose.

Dr. Neilson stated that the AMA seemingly has been nable to do much about the increasing number of in- idents in which the government has intruded further nd further into the practice of medicine.

There has been an attempt in San Francisco to orga- ize a union of Bay area physicians. The AMA has op- osed unionism. Florida's House of Delegates has reated a statewide "guild" similar to a union.

Maryland's House of Delegates passed a resolution es- ablishing a commission to study collective bargaining nd institution of class actions in behalf of the medical rofession in the AMA.

There also is the matter of the American Hospital As- ociation and its relationship to the AMA.

It has been prophesied that some form of national ealth insurance will become law by 1974.

Dr. Neilson stated that there also is the matter of a separate national House Staff organization.

The California Medical Association has expressed to their congressman and health committee leaders its strong concern over HEW's aggressive HMO spending following the CMA Council's call for a moratorium on HMO projects in the state.

The Wisconsin physicians who participated in the first pilot hearings conducted by AMA's Long Range Planning and Development Council want direct election of AMA delegates, early involvement of interns and residents on medical societies, AMA activities and placing leadership structure into the hands of young physicians. They also stressed improved AMA communications as a must. California is now polling its physicians to determine whether they wish to elect AMA delegates by popular ballot or through their district delegations.

Pennsylvania Medical Society has begun a mandatory continuing education program as of July 1.

Dr. Neilson stated that an open hearing by the Council on Long Range Planning of the AMA will be held on Saturday, June 17, and the delegation plans to prepare a ten-minute testimony summing up the thinking of the Council on the problems facing physicians and its desires in regard to changes in the AMA that will help solve these problems. Testimony can be presented on the 17th, but we need to submit a written statement immediately and then there will be our oral appearance before the Committee. Dr. Neilson stated that if we can't get this together in this short period, we can present your views in Cincinnati on November 25.

Discussion followed as to how to direct the MSMA delegation in regard to the hearing by the Council on Long Range Planning:

It was suggested that possibly the AMA Speakers' Bureau should conduct a state-to-state campaign to talk to the physicians directly.

Regarding the subject of a negotiating mechanism, it was brought out that the MSMA has told Dr. Peterson to proceed with further development.

On National Health Insurance, the MSMA should let the legislators know that the AMA wants to be consulted.

Dr. Benoit stated that we are not forced to do this in two weeks. He suggested that, possibly, the Councilors would like to think about this during the next several months and come to the Council meeting in September with a definite statement to be made at the Clinical Session in November.

Dr. Peterson indicated that we want to be sure that we don't condemn the AMA for what they are doing unless we can come up with a better way.

Dr. Neilson stated that he felt that many of the things the AMA is being asked to do they are already doing.

Dr. Hetlage stated that he felt the AMA could not be changed effectively without changing the MSMA and the local medical societies.

Dr. Cope then suggested that Dr. Neilson's report be reproduced and given to the Council and that the Council make positive recommendations for the delegates at the Cincinnati meeting.

Dr. McAlhany stated that he felt some recommendations should be made now.

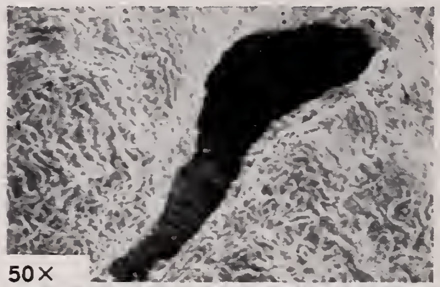
Dr. Bradshaw suggested that a positive recommendation be made that we need more factual information about what is presently going on by word of mouth. He

Progress

Diagnosis

In these illustrations of tissue from a patient with acute cystitis, you can see the swollen and inflamed mucosa of the ureteral orifice (50×), a fibrin strand (300×), and a whitish exudate composed of polymorphonuclear leukocytes (1000× and 3000×). The photographs were taken with the scanning electron microscope (SEM) by Dr. Shirley Siew, Associate Professor of Pathology at the University of Pittsburgh School of Medicine. They come from the clinical exhibit "Scanning Electron Microscopy of Urinary Tract Infection," which won first prize in Clinical Research at the May 1972 meeting of the American Urological Association.

The scanning electron microscope promises to be extremely useful in its investigation of human pathology. In time, examination of tissue with the SEM is likely to play a significant role in the diagnosis of urinary tract infection.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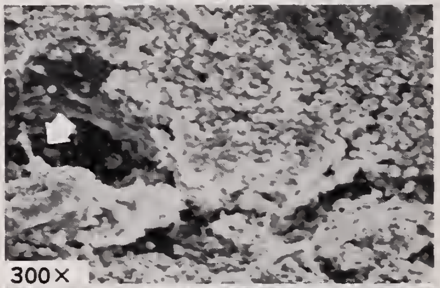
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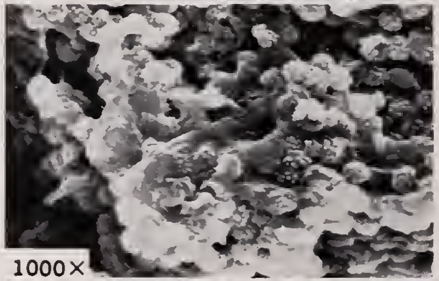
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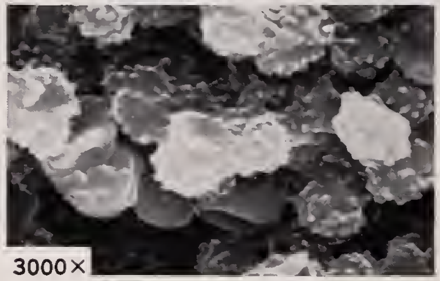
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A note on the photography:
These photographs were made b
ning electron microscope, which
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to a beam of electrons in a vacu
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of tissue which has been given a
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tissue onto a television screen, a
resulting photograph shows a th
sional effect. The tissue sections
be ultrathin, so there is a minim
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with certain important ther
advantages:

References: 1. Bran, J. L.; Karl, D. M., and Kaye, D.: *Clin. Pharmacol. Ther., 12*:525, 1971. **2.** Burke, E. C., and Stickler, G. B.: *Mayo Clin. Proc., 44*:318, 1969. **3.** Hibbard, L. T., in Bulger, M. J., *et al.: Patient Care, 1*:(3) 47, 1967. **4.** Holloway, W. J.; Furlong, J. H., and Scott, E. G.: *J. Urol., 102*:249, 1969. **5.** House, T. E., *et al.: Obstet. Gynecol., 34*:670, 1969. **6.** Lampe, W. T.: *J. Am. Geriatr. Soc., 16*:798, 1968. **7.** Moffat, N. A., and Wenzel, F. J.: *Curr. Ther. Res., 13*:286, 1971. **8.** Normand, I. C. S.: *Practitioner, 204*:91, 1970. **9.** Pryles, C. V.: *Med. Clin. North Am., 54*:1077, 1970. **10.** Seneca, H.; Peer, P., and Warren, B.: *J. Urol.,* 99:337, 1968. **11.** Trafton, H. M., and Lind, H. E.: *J. Urol., 101*:392, 1969. **12.** Cohen, M.: *Pediatrics, 50*:271, 1972.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Nonobstructed urinary tract infections (mainly cystitis, pyelitis, pyelonephritis) due to susceptible organisms. **IMPORTANT NOTE:** ***In vitro*** **sensitivity tests not always reliable; must be coordinated with bacteriological and clinical response. Add aminobenzoic acid to follow-up culture media. Increasing frequency of resistant organisms limits usefulness of antibacterial agents, especially in chronic and recurrent urinary infections.** Maximum safe total sulfonamide blood level, 20 mg/100 ml;
measure levels as variations m

Contraindications: Hypersens
sulfonamides; infants less tha
months of age; pregnancy at t
during the nursing period.

Warnings: Safety in pregnanc
lished. Do not use for Group A
lytic streptococcal infections,
(rheumatic fever, glomerulon
are not prevented. Deaths rep
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tosis, aplastic anemia and oth
dyscrasias. Sore throat, fever,
purpura or jaundice may be e
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cute cystitis:

Treatment

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a Gantrisin (sulfisoxazole)
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Therapeutic urinary and
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day dosage schedule that's
t for almost all patients.
good tolerance Gantrisin
latively few undesirable
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are. Minor reactions are
ively infrequent, but may
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e, Gantrisin may usually
ven for extended periods
ting chronic or recurrent
ucted cystitis, pyelitis or
hritis due to *E. coli* and
ceptible organisms. (See
t Note in summary of product information.) Complete blood counts and urinalyses, with careful microscopic examination, should be performed frequently.

high solubility Gantrisin (sulfisoxazole) Roche is one of the most soluble of all sulfonamides, with both free and acetylated forms highly soluble in the commonly encountered urinary pH range of 5.5 to 6.5. Urine levels have been detected in 60 minutes; therapeutic levels are usually reached in from 2 to 3 hours. About 90% of a single dose is excreted in 24 to 48 hours. As with all sulfonamides, adequate fluid intake must be maintained.

economy Average cost of therapy is still only about 6½¢ per tablet.

total therapy: 14 days Recent evidence in the medical literature suggests that therapy in acute nonobstructed urinary tract infections should be continued for 10 to 14 days even if patients become asymptomatic in 2 or 3 days, as they often do.[1-11] However, one investigator, evaluating a 5-year study of sulfisoxazole used to treat urinary tract infection in 368 girls, found no advantage in continuing therapy more than two weeks *for a first infection.*[12]

For acute, chronic or recurrent nonobstructed cystitis, pyelitis, or pyelonephritis due to susceptible organisms...

begin with
Gantrisin®
sulfisoxazole/Roche®

Usual adult dosage: 4 to 8 tablets *stat*
2 to 4 tablets *q.i.d.*

n should be performed fre-

s: Use cautiously in patients
red renal or hepatic function,
rgy or bronchial asthma.
, frequently dose-related, may
ucose-6-phosphate dehydro-
ficient patients. Maintain
luid intake to prevent crystal-
tone formation.
eactions: *Blood dyscrasias:*
ytosis, aplastic anemia, throm-
ia, leukopenia, hemolytic ane-
ra, hypoprothrombinemia and
lobinemia; *Allergic reactions:*
multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; *Miscellaneous reactions:* Drug fever, chills and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L.E. phenomenon have occurred. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

stated that he did not know enough about it to give definite recommendations.

Dr. Cope asked Drs. McAlhany, Hansbrough and Bradshaw to formulate a statement or recommendations for the AMA delegation and to have it ready for action of the Council the following morning.

Dr. Miller moved that the matter regarding recommendations to the Missouri delegation concerning AMA organization be tabled until the following morning. The motion was seconded and passed.—**Referred to Reports of Officers Committee.**

APPOINTMENT OF COMMITTEE ON RAPID PRESS RELEASES

■ Dr. Cope pointed out that there is a need to make knowledgeable and effective responses to items appearing in the various news media. He suggested the following way to do this: (1) A committee of one doctor be appointed. This committee could be composed of the President; (2) Staff will compose answers to various items and then seek approval of the committee to release the answer as quickly as possible. Input would come from all over the state.

Dr. Hetlage moved that a committee composed of the President be appointed to work with the staff in developing responses to items appearing in the various news media. The motion was duly seconded and carried.—**Referred to Miscellaneous Affairs Committee.**

REPORT OF THE COMMISSION ON CONTINUING EDUCATION AND HEALTH MANPOWER

■ A meeting of the Commission on Continuing Education and Health Manpower and its ad hoc committees met on May 14. Mr. Fox indicated that the Ad Hoc Committee—115th Annual Session had made an evaluation of the 1972 Scientific Sessions. This is the first year that a number of specialty groups has sponsored scientific sessions as a part of the program. There were 17 sessions sponsored by medical specialists and three general sessions. All reported favorably on the new format. An inquiry has been sent to each specialty and all replies to date indicate that they were satisfied with the format. If invited, they will be glad to sponsor a session next year. The Committee also indicated that this same format will be used for planning the 115th Annual Session.

Dr. McAlhany moved acceptance of this portion of the report. The motion was duly seconded and carried.

Mr. Fox stated that if the Council approves, perhaps the 1974 meeting in Kansas City could be moved to the Crown Center. He indicated that at present, the only available date at the Crown Center is the weekend of April 4-7, 1974, and he would like to hold these dates. Dr. Miller inquired as to whether or not the possibility of using the Alameda Plaza in Kansas City had been investigated. Dr. Cope requested an investigation of the Alameda Plaza.

Dr. McAlhany moved that the dates of April 4-7, 1974, be held at the Crown Center. The motion was duly seconded and carried.

It also was moved that an investigation of the Alameda Plaza be made. This motion was duly seconded and carried.

The report of the Ad Hoc Committee on Health Manpower was presented. Mr. Fox reported that there had been negotiations with the nursing profession for guidelines to be drafted covering four specific patient care services identified by the nursing profession as practice of medicine but actually performed in certain small hospitals by the nurses. Mr. Fox indicated that Dr. Worley the chairman of the Ad Hoc Committee, is planning another meeting with the nurses to resolve differences The results will be reported to the Council at its September meeting.

Mr. Fox reported that the Health Careers Recruitment Program which was developed by the Missouri Hospital Association, funded by RMP and endorsed by MSMA has been resumed. This program is an educational effort to explain to student assemblies the opportunities in health careers. The Hospital Association will be invited to again cosponsor with the MSMA an exhibit booth on Health Careers at the 115th Annual Session in 1973.

It was moved and seconded to approve this portion of the report. The motion carried.

Dr. Paul Young, chairman, gave the report of the Ad Hoc Committee on Continuing Medical Education. He reported that the MECO program will be continued this summer and that there are 12 hospitals in the program involving 19 students.

Dr. Young then reported on the MSMA Continuing Medical Education Program, Phase I and Phase II. Dr Young indicated that a state level CME Conference is scheduled for June 24 and 25. He indicated that the CME Committee, the CME Councilor District Directors MSMA Council and Officers and other interested persons will be invited to attend. He also stated that the following national authorities on CME will address this conference: Mr. LeRoy Erickson, Director, Educational Activities, Pennsylvania Medical Society; Robert Evans M.D., Dean, Rockford School of Medicine, Rockford Illinois and Sigurd Sivertson, M.D., Assistant Dean, Continuing Education, University of Wisconsin Medical School, Madison, Wisconsin. Dr. Young indicated that the budget for this meeting is $825 and that he would like Council approval for the expenditure of this money

Dr. Franklin moved the acceptance of Dr. Young's report and in so doing, authorized the expenditure of funds. The motion was duly seconded and carried.

Dr. Cope noted the absence of Mrs. Bertha Thomas who had requested to be excused from Council meetings. He stated that he will write a letter thanking her for her years of service to the Council.

FUND DRIVE FOR CANCER RESEARCH CENTER

Dr. John S. Spratt, Chief Surgeon for the Ellis Fische State Cancer Hospital and State Coordinator for Cancer Control, presented a brief history and background information on the Cancer Research Center. Dr. Spratt stated that the Cancer Research Center was founded in 1963 as a nonprofit corporation. He stated that when CRC was founded in 1963, the Columbia Chamber of Commerce raised $60,000 seed money for initial operation costs. At present, one building has been constructed and includes a small cancer detection clinic. CRC presently has an arrangement with the Medical School whereby students and residents rotate through the various programs. Currently, CRC has an annual budget of approximately $1,000,000. The Cancer Research Center has entered into a contract with the Missouri Division of Health for the development of a State Tumor Registry.

Dr. Spratt indicated that there is a drive under way to raise $3.7 million for the Cancer Research Center. Aproximately $2.7 million will be used for construction of needed facilities and $1 million will be used to develop new programs. Dr. Spratt extended an invitation to all present to visit the Cancer Research Center.

CANCER DETECTION CLINIC

Dr. James N. Hueser, Director of the Cancer Detection Clinic, presented information on the Cancer Detection Clinic, which is part of the Cancer Research Center. This Clinic was formed to try to develop a plan for the early detection of cancer. At present, the Clinic is being staffed by himself and a practicing gynecologist in Columbia. It is now operated on a fee-for-service basis, but Dr. Hueser indicated that there is a proposal before the National Cancer Institute to fund an expansion program. He indicated that in four months of operation, approximately 100 patients have been examined. Dr. Hueser stated that they are trying to expand to the point where approximately 40 to 50 persons per day could be examined at the Clinic. Dr. Hueser explained the various procedures that are used in examinations at the clinic.

During discussion, it was pointed out that only a small portion of the money collected by the Cancer Society is used in Missouri. Dr. Spratt indicated that he, in his capacity as State Coordinator for Cancer Control, will look into various sources of funding and then be able to make recommendations for future funding.

Dr. Chandler asked Dr. Spratt if he thinks the Council could be helpful. Dr. Spratt indicated that they are trying to develop a cancer control plan for the state of Missouri and that he will need input from and the endorsement of the Council if he is to get appropriate funding for this plan.

Dr. Cope stated that there are three things that need to be considered in regard to the above reports:

1. Do you wish to accept the report of Dr. Spratt on the fund drive for the Cancer Research Center?

Dr. Chandler moved acceptance of this report. His motion was duly seconded and adopted.

2. Do you wish to accept the report of Dr. Hueser for the Cancer Detection Clinic?

Dr. Chandler moved acceptance of the report, the motion was duly seconded and adopted.

Dr. Cope asked the Council what they would like to do in regard to further liaison with Dr. Spratt concerning the use of Cancer Society funds. Dr. Cope then indicated that Dr. Spratt will be asked to attend a Council meeting at a future date and this matter will appear on the agenda at that time.—**Referred to Medical Education and Public Welfare Committee.**

JOINT COMMISSION ON ACCREDITATION OF HOSPITALS WORKSHOPS

■ Mr. Fox indicated that the JCAH had recently revised its standards and is offering workshops to Hospital Administrators and others in order to familarize them with the new standards. He stated that in Missouri, this workshop will be jointly sponsored by the Missouri Hospital Association and MSMA. The Hospital Association has sent out a survey to determine interest in attending such a program. To date, 139 persons have indicated interest in attending a workshop of this type. When the MSMA and the Hospital Association tried to set dates for this workshop, it was found that there were no open dates that could be met by both Associations and the JCAH. It was suggested that this could be combined with the "Mini-Estes" Conference, which will be held on March 1, and that the JCAH Workshop could be held on March 2 and 3. The JCAH charges $50 per person for materials and faculty travel and an additional $30 for administrative costs. Mr. Fox indicated that the Osteopathic Association will not be one of the sponsors of this workshop, but that the workshop probably will include both M.D.s and D.O.s since a number of hospitals in the state have both M.D.s and D.O.s on staff.

The motion was made, seconded and adopted that the council approve the holding of the JCAH Workshop in conjunction with the Large and Small Hospitals Conference.—**Referred to Miscellaneous Affairs Committee.**

REPORT OF THE JOINT COMMISSION ON MEDICAL-LEGAL AFFAIRS

■ The Medical-Legal Committees of MSMA, Missouri Association of Osteopathic Physicians and Surgeons and the Missouri Bar Association held a joint meeting on May 6 and made the following recommendations:

1. That the Associations represented request permission from parent organizations to receive and attempt to resolve complaints arising between physicians and attorneys in their interrelated practice that cannot be resolved at the local level.

2. That the Associations represented should continue to hold joint meetings.

3. That the committees should obtain additional information on pretrial screening panels.

Dr. Matthews requested that the report be amended to include the following recommendation:

4. That the members of the MSMA Medical-Legal Commission discuss the Good Samaritan Law with members of the Bar Association who attend these meetings and encourage them to discourage their members from advising physician clients not to act as good Samaritans because of the danger of liability.

Dr. Hetlage moved that the report be accepted as amended. The motion was duly seconded and adopted. —**Referred to Constitution and Bylaws Committee.**

MSMA SPONSORSHIP OF FUTURE TOURS

■ Mr. Cooper informed the Council that, as of Saturday morning, 95 persons had signed for the Caribbean Cruise. He also indicated that 12 hours of scientific programs are scheduled and that these hours have been approved by the AAFP.

Mr. Cooper then indicated that the Councilors and Officers had previously received information on two different tours of Scandinavia. He requested Council action as to whether or not they wish to sponsor one of these tours.

Dr. Gunn moved that the MSMA sponsor the INTRAV tour to Scandinavia in May or June, 1973. The motion was seconded and adopted.—**Referred to Medical Education and Public Welfare Committee.**

REPORT OF AMA DELEGATES REPORT

■ Following Dr. Neilson's report on Saturday, Drs. Bradshaw, Hansbrough and McAlhany were appointed to a committee to formulate a statement to be given to the AMA Delegation for use at the Annual Session in San Francisco. Drs. McAlhany and Bradshaw presented the following statement:

"The Missouri Delegation recommends that the House of Delegates sponsor a nationwide program to promote the goals and aims of the AMA. We suggest that the AMA, through the Speakers Bureau, organize a state-by-state program which will inform all physicians of the intent of organized medicine."

Dr. Hansbrough stated that he concurred with the original report as given, but that he would like to make an additional report that includes the following five items:

1. That the AMA, through the Long Range Planning Committee, look into the method of election of AMA Delegates.
2. That the AMA should consider setting up a section of hospital physicians, allowing such physicians to be either members of this group or the section in the specialty in which they practice.
3. That the AMA continue to keep an open mind on HMO's, but pointing out that the cost record so far has been poor using for example statistics from medical clinic associations.
4. That the AMA consider statements such as doctors being democratic and be willing to support legislation as desired by the people, but begging for input into such programs about which we should and do have expertise.
5. That the AMA issue no statement on unions.

Dr. Neilson stated that many of the items suggested are already being implemented and that the AMA has good consultative bodies to turn to and their information is up-to-date and first class. Dr. Peterson stated that the way in which delegates are elected is a function of the state society and not a function of the AMA.

Dr. Hetlage made the following recommendation concerning Council position on the AMA:

"That the position of our AMA delegation as instructed by this Council shall be one of change in the structure of organized medicine from the county society level to the higher echelons of the AMA, so that the structure and image of organized medicine shall be relevant to the social and economic structure of society today. That these changes be made only after reasonable and advised study of present structure and the alterations and problems involved in changing established modes of operation."

This recommendation was made in the form of a motion and passed during the summary session.

Dr. Bradshaw stated that he felt that our AMA delegation is well informed and should be able to use its own judgement in our behalf. He saw no point in giving our delegation specific instructions. Dr. Mayer stated that he felt there are no elegant solutions to these problems. He then mentioned the age factor that exists not only in the AMA, but also at the state society level, and felt that this is another problem that should be considered.

Dr. Miller moved that the Council accept the report of Dr. McAlhany as extended by Dr. Hansbrough and that this, together with the deliberations, be submitted to the AMA Delegation for appropriate use as they see fit at the Annual Session in San Francisco. Councilors should make further study of this and give specific instructions to the AMA Delegation in September. The motion was duly seconded and adopted.—**Referred to Reports of Officers Committee.**

REPORT OF THE COMMITTEE ON LEGISLATIVE AFFAIRS

■ Dr. Matthews reported on legislation supported by the MSMA that was passed; legislation opposed by MSMA that did not pass; and legislation that passed that was of interest, but upon which MSMA did not have a position.

Dr. Matthews stated that the passage of Concurrent Resolution #5 was of special interest. This resolution establishes a joint committee of Senate and House members to investigate the deficiencies in the federal-state medical care programs, the general costs and operations of providers of medical care and to establish viable alternatives or improvements to our present system of medical care in the state.

Dr. Matthews indicated that the Legislative Committee is planning needed legislation and hopes to have the following bills ready for early introduction next Session: 1. Legislation to provide for the establishment of ambulatory care centers; 2. Legislation to provide for immunity from liability for review physicians; 3. Legislation to provide a broad consent bill; and 4. Legislation to provide for mandatory labeling of prescriptions.

Dr. Miller stated that he would like to see changes in the Nurses Practice Act to allow for the RN-Midwife. Dr. Matthews stated that through a resolution in the MSMA House of Delegates, we could make known how physicians stand on this issue and that we should work with the Nurses Association in getting needed legislation to change their practice act.

Dr. Gunn read a letter that had been received from the Missouri Association of Nurse Anesthetists. This Association is seeking approval of MSMA and other health organizations in issuing a joint statement regarding the qualifications of individuals administering anesthetics in the state of Missouri. Dr. Gunn asked that this matter be referred to the Legislative Committee for further study.

Mr. McIntyre indicated that the Governor of Missouri will probably call a special session of the Legislature in September and that legislation regarding Blue Cross and Blue Shield may come up again at that time.

It was moved that the report of the Committee on Legislative Affairs be accepted with commendation. The motion was seconded and adopted.

CONSUMER HEALTH INFORMATION PROGRAM

The Commission on Public Affairs had been asked by the Council to evaluate the Consumer Health Information Program developed by the University of Missouri, following the request of Dr. Arthur Rikli for MSMA approval. The Commission made the following recommendations regarding the CHIP Program:

1. Approve the CHIP and so notify Dr. Rikli. (To disapprove would not stop the program and would tend to represent negativism to the public.)
2. Volunteer assistance in whatever areas seems needed by the medical sector.
3. Respectfully request follow-up reports at each Council meeting by Dr. Rikli as to project developments.

The motion was made and duly seconded for acceptance of the three points. The motion carried with one dissenting vote.—**Referred to Miscellaneous Affairs Committee.**

APPOINTMENT OF EDITORIAL BOARD

■ Dr. Finnegan recommended that the following members be appointed to the Editorial Board of Missouri Medicine for 1972-1973: Drs. Robert K. Skillman, Kansas City; Wilfred E. Wooldridge, Springfield; James N. Haddock, St. Louis; William A. Leo, Kansas City; William M. Hart, Columbia; Leo T. Neu, Jr., Springfield; Richard D. Blim, Kansas City; John W. Berry, St. Louis;

Charles R. Willman, St. Joseph; Thomas M. Mier, St. Louis; Bentley A. Nelson, Kansas City; Donald J. Mehan, St. Louis; John S. Spratt, Jr., Columbia; Wayne A. Simril, St. Louis; Ben H. Koon, Bolivar; Raymond A. Ritter, Jr., Cape Girardeau.

It was moved that these members be appointed to the Editorial Board for 1972-1973. The motion was seconded and carried.—**Referred to Reports of Officers Committee.**

Meeting of Sept. 16-17, 1972

■ James C. Cope, M.D., Columbia, Chairman, called the meeting to order. Those present were Drs. Cope; Walter T. Gunn, St. Louis; E. A. Stricker, St. James; John I. Matthews, Jefferson City; Gerald L. Miller, Kansas City; Charles R. Gulick, St. Louis; John N. Martin, St. Joseph; Lysle M. Bach, Hannibal; Max S. Franklin, St. Louis; Louis P. Hetlage, Troy; William D. Bradshaw, Clinton; R. Allen Chandler, Kansas City; Howard J. McAlhany, Springfield; Claude W. Cooper, Thayer; Eugene T. Hansbrough, Poplar Bluff; J. Loren Washburn, Versailles; Stanley S. Peterson, Springfield; Arthur W. Neilson, St. Louis; Hector W. Benoit, Jr., Kansas City; William D. Mayer and William C. Allen, Columbia; M. Kenton King, Samuel Guze, George Thoma, St. Louis; R. K. Noback, Kansas City; Herbert R. Domke, Jefferson City; George Ladyman, Poplar Bluff; Mrs. Keith D. Jones, Warrensburg; Mrs. Charles Willman, St. Joseph; Messrs. John W. Noble, Kennett; John R. Smart and William Tetley, Fayette; Allen D. Smith, Kansas City; Hollister S. Smith, St. Louis; Gary L. Schnedler, Springfield; E. Mark Halvorson, Jefferson City; Ray McIntyre, Tom P. Fox, Royal O. Cooper and C. C. Swarens, Jefferson City, Staff.

Chairman Cope called the meeting to order and requested approval of the minutes of the June 3-4 Council Meeting. On motion of Dr. Gunn, duly seconded, the minutes were approved as distributed.

Dr. Cope then asked Dr. King of Washington University to introduce his guest. Dr. King introduced Dr. Samuel Guze, the new Vice-Chancellor for Medical Affairs of Washington University.

REPORT OF THE EXECUTIVE SECRETARY

Mr. McIntyre indicated that Mr. Cooper has been named to head one of the sections of the United Community Fund (UCF) campaign in Jefferson City.

Mr. McIntyre stated that flowers had been sent to the funerals of Dr. C. E. Burford, a Past-President of MSMA; Dr. Martyn Schattyn, a Past Vice-President of MSMA; and Dr. Wendell Scott. A resolution also was introduced into the AMA House of Delegates relative to Dr. Scott.

Mr. McIntyre said that at the last meeting of the Council, staff was asked to look into different possibilities for a meeting place in 1974 for the annual session, which is scheduled to be held in Kansas City. He asked Mr. Fox for a report. Mr. Fox stated that he had checked into the Alameda Plaza as a possible site and stated that the maximum number of guest rooms available for booking a convention would be 225. Last year, the MSMA occupied approximately 270 rooms. He further reported that Alameda Plaza did not have meeting room space required for the annual session. Mr. Fox reported that tentative dates have been set with the Crown Center and the Muehlebach Hotel. MSMA is holding the dates of April 4-7, 1974. It was pointed out that Southwest Clinical Society will hold its meeting at Crown Center in the fall of 1973. Mr. Fox asked the Council for approval to confirm the dates at one of the two places.

Dr. Chandler moved that the dates of April 4-7, 1974 be confirmed at the Crown Center in Kansas City for the 116th Annual Session. Motion was seconded and carried.

Mr. McIntyre stated that for the coming year, at the suggestion of the Council, MSMA is offering exhibitors a choice of either exhibiting or in lieu of that, giving a cash grant in the amount of the cost of an exhibit space. Mr. Swarens then reported that as of September 14, we have assigned ten exhibit spaces and three companies have indicated their intention to give cash donations in lieu of an actual exhibit space.

Past-Presidents of the MSMA

Fourteen Past-Presidents of the Missouri State Medical Association were introduced and honored at the Presidents' Banquet.

(Left to right, first row) Drs. Donald M. Dowell, Chillicothe; Walter T. Gunn, St. Louis; Harold A. Goodrich, Webster Groves; Robert Mueller, St. Louis; Gerald L. Miller, Kansas City; Victor B. Buhler, Kansas City; W. A. Bloom, Fayette.

(Second row) Drs. Byron M. Stuart, Boonville; Paul R. Whitener, St. Ann; Kenneth C. Hollweg, Kansas City; David N. Kerr, St. Louis; Joseph L. Fisher, St. Joseph; Raymond O. Muether, St. Louis; and Guy N. Magness, University City.

Mr. McIntyre asked that an additional item be placed on the agenda. He indicated that representatives from Central Methodist College in Fayette would present a proposal regarding a Community-Based Educational Manpower Project in Rural Mid-Missouri.

The Chairman then introduced Mr. Lee Mortenson to the Council. Mr. Mortenson is with the Department of Field Service of the AMA.—**Referred to Reports of Officers Committee.**

REPORT OF COUNCILORS

■ *District #10*—Dr. Hansbrough said that he reported at the last meeting regarding their local extended care facility. He stated that it is closed at the present time for repairs and feels that it probably will not open again. Apparently, the requirements of law relative to these facilities are quite demanding. He indicated that he understands these closings are happening in other parts of the state. He said that he feels this will bring on other problems. Some patients may now have to be in hospitals longer where there is no extended care facility.

Dr. Hansbrough stated that he would like to give a second report on the federal HMO that was going into Lilbourn, Mo. He reported at the previous Council meeting that the Bootheel CHP Agency had approved this. He indicated that the structure of this organization has changed. A St. Louis group has taken over this project. After this restructuring, the Bootheel CHP Agency then asked to review it again, and was refused. They apparently have the feeling that the way they will get the patients seen in the HMO is by paying the UCR fees to see the people in the HMO, as Missouri physicians get paid very low fees from Medicaid and most of these patients are Medicaid patients. Dr. Hansbrough indicated that the Executive Secretary of the Bootheel CHP felt sure that this project got through CHP in a form which would today be rejected.—**Referred to Resolutions Committee.**

■ *District #1*—Dr. Martin reported that someone in his district was looking for an anesthesiologist and found one from Canada who was licensed in one of the Carolinas. She was board certified in anesthesiology. She could not get a license in Missouri without taking the examination. She immediately applied to Indiana and was granted a license by reciprocity. Dr. Martin voiced his concern about this.

Dr. Martin called the Council's attention to the Interprofessional Code which was sent out recently and indicated that his Society has accepted this Code. He stated that he felt that if the local medical societies accept this code, it also should be accepted by the local lawyers associations.—**Referred to Medical Education and Public Welfare Committee.**

■ *District #9*—Dr. Cooper indicated that his district plans to have a Councilor District meeting soon, but definite plans have not been made as yet.

District #8—Dr. McAlhany reported that since the ruling on the Curteman Case, the ophthalmologists in his area have been very concerned. He said that he understood the ophthalmologists are setting up an independent organization to consider problems involved.—**Referred to Miscellaneous Affairs Committee.**

■ Dr. McAlhany reminded the Council of the November meeting in Springfield when Dr. Carl Hoffman, President of AMA, will attend. He stated that they would like to have a cocktail party for Dr. Hoffman with the Council and Officers present. He stated that he felt this is a stat function and asked the Council to assist financially. Thi request was approved.—**Referred to Reports of Officer Committee.**

■ Dr. McAlhany said that Greene County has an M.D physician running for Coroner in November.

He reported that they have petitioned the General Assembly for a statewide Medical Examiner System. It wa suggested that this might be done first on a pilot basis Dr. McAlhany stated that if they do get the M.D. fo coroner, they undoubtedly will try to set this up as pilot project in Greene County.

Dr. McAlhany said that the judge recently ruled in favor of the "Singing Doctors of Greene County" agains the IRS.

District #3—Dr. Franklin said that he recently attended a meeting of the Council of St. Louis Medical Societ where several things were discussed. Two plans for physician assistants were discussed. One was from Dr. Hofstetter for the St. Louis State Hospital for psychiatri nurse assistants. This was approved by the St. Loui Medical Society Council. Dr. Franklin stated that the had suggested to them that local matters should be handled locally and not by the state. Another plan presente by Dean Wochner for physician nurse assistants wa quite extensive. A committee was appointed to stud this proposal.

Dr. Domke reported that a short time ago there wa some discussion regarding the development of an O nurse assistant and an Attorney General's opinion wa sought. An adverse opinion was received from him. Dr Domke indicated that he felt this might have some bearing on the plans that St. Louis Medical Society is reviewing. Dr. Miller said that he felt these things should b brought before the state organization so that there ca be some uniformity. Dr. Hetlage stated that the reaso for the development of a concept of what these peopl may or may not do is to stop the development of a patchwork type of physician assistant. He said he felt thi should be brought back to the Council for consideratio and input rather than on a local basis.

Dr. Franklin stated that it might be worthwhile if a copy of this proposal from Dean Wochner be sent to each member of the Council. Dr. Cope indicated that the Council would await the results of the St. Louis Medical Society committee action on this.—**Referred to Miscellaneous Affairs Committee.**

■ St. Louis County and St. Louis Medical Societies have appointed a committee regarding the building of one building for the use of both medical societies. Committees have been appointed for changes in the bylaws to accommodate this. Committees have been appointed to study the use of the building by both organizations. Dr. Franklin said that more than 125 County members have joined the St. Louis Society for Medical and Scientific Education.

An Insurance Liaison Committee of both the city and county headed by Dr. Kinsella, HIC and the metropolitan hospital association have launched a campaign on the conservation of the health care dollar. The plan is to launch new materials every three months to (1) alert the physicians, (2) the patients or consumers and (3) hospital employees to help with the conservation of the health care dollar.—**Referred to Reports of Officers Committee.**

■ Dr. Franklin indicated that he wanted to endorse what Dr. McAlhany said about the ophthalmologists. He

MSMA Members Receive 50-Year Pins

MSMA members who have completed 50 years in the practice of medicine were honored at the Presidents' Banquet. Receiving 50-year pins from President Walter T. Gunn were *(left to right)* Drs. L. P. Freimuth, St. Louis; Alfred J. Cone, Chesterfield; George V. Feist, Kansas City; Leo P. FitzGerald, St. Louis; Thomas B. Hall, Arrow Rock; Harry C. Lapp, Kansas City; Emmett F. Hoctor, Farmington; Sol Weber, St. Louis; and John W. Williams, Springfield.

stated that he was informed that they are forming a new organization because their present bylaws state that they cannot become involved in legislative matters. Apparently, they are forming this new organization for possible legislative action.—**Referred to Miscellaneous Affairs Committee.**

■ *District #7*—Dr. Chandler reported that Jackson County Medical Society approved in principle a treatment program for alcoholics.

He stated that some of his members are extremely upset with the Board of Healing Arts, particularly regarding certain policies. He stated that industry in the area is having a difficult time with absenteeism. There are frequent abuses. Investigation has shown that workers go to certain physicians and secure a sick leave slip certifying that they are sick. This is costing hundreds of thousands of dollars each year. Representatives of the Board of Healing Arts have had meetings with these people. They have investigated and found that such a thing does exist. However, they have taken no action, at least not to the satisfaction of the local physicians.

Dr. Chandler reported that recently there was a seminar on acupuncture in Kansas City. The fee for attendance was quite high. However, the seminar was well attended. Dr. Chandler indicated that he felt some decision should be forthcoming from the Board of Healing Arts stating whether acupuncture is or is not the practice of medicine.

Mr. Cooper indicated that all the information we had on acupuncture had been sent to their office prior to the August Board meeting, suggesting that they take the New York approach which declared acupuncture the practice of medicine.

Dr. Chandler stated that he felt many physicians are not knowledgeable about what the AMA does for them and Jackson County has been running a series of articles regarding activities of the AMA. He indicated that he felt this is something societies who have bulletins should look into, as this is a good form of communication.—**Referred to Medical Education and Public Welfare Committee.**

■ *District #4*—Dr. Hetlage reported that the majority of his Councilor District work at its recent meeting was done on input to the AMA. He indicated that he feels his delegates to MSMA are contributing significantly and his meeting with them prior to Council meetings works very well in his district.—**Referred to Reports of Officers Committee.**

■ Dr. Hetlage said that they discussed the matter of emergency hospital services, as recommended by the Sub Task Force on Emergency Health Care Services, and the problems inherent in categorization of hospitals and which class certain hospitals will come under. Possibly, the hospitals should be asked to categorize themselves. Dr. Hetlage reported that they did endorse this plan.—**Referred to Miscellaneous Affairs Committee.**

■ He stated that they discussed the Negotiation of Professional Fees and have some questions about it. He reported that they are in favor of this, but do not want to create another problem such as took place with the HCF.

He reported that family planning was discussed, but this would be reported in the Ad Hoc Committee presentation.

Dr. Hetlage stated that his district is pleased with the input they have had into Blue Shield in St. Louis. However, there is no input into Blue Cross whatsoever.—**Referred to Resolutions Committee.**

■ He thanked the AMA Delegates for introducing the two resolutions from his district at the AMA San Francisco meeting.

He asked if there is any possibility that his local delegates and alternates might receive copies of the weekly *AMA Newsletter* (green sheet).

Dr. Hetlage asked the Chairman to call an Executive Session to discuss several items of concern in his particular district.

District #6—Dr. Bradshaw said that he did not have a report at this time, but requested time later.—**Referred to Reports of Officers Committee.**

■ *District #5*—Dr. Cope reported that he had received a call from Dr. Schertz indicating that some ophthalmologists in the state are proposing legislation relating to physician assistants. Dr. Cope stated that he felt a stand must be taken regarding acupuncture and the Council must decide what to do in regard to the ophthalmologists' proposals.—**Referred to Miscellaneous Affairs Committee.**

■ Dr. Gunn again introduced the subject of things being considered at the local level prior to their being approved at the state level. It was pointed out that when federal grants are involved, they usually require both local and state approval.—**Referred to Medical Education and Public Welfare Committee.**

ACUPUNCTURE

■ The Chairman then indicated that he felt a stand should be taken on acupuncture and called for discussion.

Dr. Matthews stated that it is his understanding that in the state of New York, the State Board declared acupuncture the practice of medicine. He indicated that he felt the Council might propose that the Missouri Board of Healing Arts proceed along these same lines. Dr. Cope stated that he is of the opinion that the actual puncturing of a human body with a needle is the practice of medicine.

Following further discussion, on motion of Dr. Gunn, duly seconded, the matter of acupuncture was referred to the Commission on Continuing Education and Health Manpower for study and a report back to the Council.

Discussion then was held regarding Dr. Martin's concern over licensing procedures of the State Board. It was pointed out that we do have reciprocity with various states, but on an individual basis. Dr. Martin indicated that he would check into this matter a little further and get more of the details.

Discussion followed regarding the Board of Healing Arts' apparent lack of investigation and action against certain physicians licensed in Missouri. It was indicated that licensure and activities of the State Board is of sufficient importance that possibly a special meeting of the Council with the State Board might be worthwhile with an agenda planned ahead of time so that some mutually satisfactory answers might be worked out. It then was suggested that possibly our Executive Committee should meet with the State Board at least once annually.

After brief discussion, it was moved and seconded that the President of the State Board of Healing Arts or his Board representative be invited to future Council Meetings. Motion carried.—**Referred to Medical Education and Public Welfare Committee.**

PHYSICIAN ASSISTANTS

■ The Chairman then called for discussion regarding the ophthalmologists and physicians' assistants.

Dr. Chandler said that he was invited to a meeting which the ophthalmologists held. He stated that they feel they have many problems since the Curteman ruling. Many of their assistants do preliminary studies that free the M.D. for more diagnosis and treatment. They feel that some new legislation is needed and are drafting a bill with legal help. He said they asked him to bring this matter to the Council because they want to work closely with the MSMA. Dr. Chandler reported that the ophthalmologists thought they could tack their bill onto our physician assistants bill, which they indicated was coming up in January and being worked on now. Dr. Chandler stated that he told them he was not aware of any bill being worked on at the present time, but, in fact, he understood we were going to wait until we had more information from the AMA.

Dr. Hetlage stated that his contact with Dr. Schertz on this matter was one phone call. Dr. Hetlage said tha MSMA did pass a resolution favoring such legislation but we really need more information and it obviously i getting more complicated.

Dr. Cope suggested that possibly a letter should be sent to them indicating that at the present time there i no legislation regarding physicians assistants being considered and that they should keep us informed of thei activity.

Dr. Peterson indicated that it was his understanding that the AMA has recently come out and okayed some training programs for medical assistants.

Following further discussion, motion was made by Dr Gunn and seconded that the Chairman compose a suitable letter to be sent to Dr. Schertz and that formal action on this letter be taken on Sunday morning. Motion carried.—**Referred to Miscellaneous Affairs Committee.**

BUDGET COMMITTEE

■ Chairman Cope appointed the following Budget Committee for 1973: Drs. Gulick, Gunn, Stricker, Cope, Chandler, Martin.

COMMITTEE ON ARRANGEMENTS

The following physicians were named by the Chairman of the Council to the Committee on Arrangements for the 115th Annual Session: Drs. Franklin, Hetlage and Bach.—**Referred to Reports of Officers Committee.**

MSMA SPONSORSHIP OF TOURS

■ The Chairman then named the following members to study the various tour material for the fall of 1973 and suggest which one MSMA should sponsor: Drs. Martin, Chandler and Hetlage. This suggestion is to be brought to the Council Meeting on Sunday morning.—**Referred to Medical Education and Public Welfare Committee.**

PRESIDENT'S REMARKS

■ President Gunn reported that he had received correspondence from Dr. Mebust of the Kansas City Urological Society asking that they be the spokesman for the urologists in the western part of the state instead of the Federation of Missouri Urologists.

Dr. Cope stated that the Federation meets once each year at the site of the MSMA Annual Session. Its membership is statewide. The Kansas City Urological Society has members as far west as Colorado. Dr. Cope stated that at their last meeting in April in Kansas City, the Federation voted to go along with the Health Care Foundation. Dr. Cope indicated that he would write suggested letters to go to Dr. Mebust and the President of the Federation for Council approval on Sunday morning. Dr. Benoit indicated that the HCF had not received word from the urologists indicating they would participate on review panels.—**Referred to Miscellaneous Affairs Committee.**

■ Dr. Gunn reported that he had received a letter from Dr. McCallister of Kansas City regarding problems in computer interpretation of electrocardiograms. He feels that we should go on record as opposing it. He indicated that he would be happy to meet with anyone to discuss this. On motion of Dr. Gunn, duly seconded, it was recommended that this matter be sent to the MSMA Commission on Continuing Education for study and hearings. Motion carried. The motion was then amended to include that it also be sent to Jackson County Society for study.

Dr. Gunn received letters from HEW regarding our Resolutions #16 and #25 which we sent to them. In response to Resolution #16, "Support for Fee for Service Medical Care," they indicated that the Administration's recommended health care bills provide for continuing support of fee for service practice. In reply to Resolution #25, "Charges Imposed by Immediate Relatives," they indicated that they couldn't do anything about this. This would take legislative action.

The President stated that Dr. Miller and Dr. Paul Young have been named as official representatives of MSMA to attend the AMA Continuing Medical Education Conference on October 24-26 in Chicago. Dr. Gunn indicated that a letter had been received from Dr. Berry of Kansas City volunteering to serve as a MSMA representative inasmuch as he was going anyway. He was appointed as a third MSMA representative to attend this CME meeting. Dr. Gunn stated that Mr. McIntyre also would attend this meeting.

Dr. Gunn indicated that at our suggestion, Dr. G. Donald Shull of Jefferson City was named by Governor Hearnes as a member of the Missouri Board of Nursing Home Administrators. Dr. Shull replaces Dr. W. A. Bloom on the Board.

We have written to the AMA Board of Trustees asking them to send a member of the Board to the 115th Annual Session. However, we have not had a reply to this.

Dr. Gunn reported that Dr. Hollweg had received a letter from AMPAC commending him upon our support of AMPAC.

The President indicated that the Food and Drug Administration has stopped the shipping or selling of the Diapulse Machine in interstate commerce.—**Referred to Medical Education and Public Welfare Committee.**

■ Dr. Benoit, Chairman of the Health Care Foundation of Missouri, then gave the following report regarding the Foundation. He gave a statistical review of the membership. The Foundation has enrolled voluntarily 2,555 physicians in the state of Missouri—2,019 M.D.'s or 55.7% of the MSMA membership and 536 D.O.'s or 63.4% of their organization—59.5% of the two groups. Dr. Benoit stated that when the Foundation was first formed, they wanted to have at least 60% participation, but now feel that 80% is needed if they are going to get the type of support they want.

The HCF Board, at its June meeting, indicated that the HCF should make its services available to hospitals in whatever role they felt would be helpful. A letter was sent to the hospitals explaining this. It was sent to 98 hospitals with less than 100 beds and 96 hospitals with more than 100 beds. Of this number, replies were received from 49, of which 25 indicated they did not foresee a need for such service. Twelve hospitals with less than 100 beds expressed a keen interest and six hospitals with more than 100 beds expressed similar interest. Five hospitals with less than 100 beds indicated they might at some time be interested and one hospital with more than 100 beds.

Dr. Benoit stated further statistics, indicating that it is of considerable concern that the HCF has reviewed only 229 cases.

The law suit, as it relates to the Health Care Foundation, is at the moment awaiting a date for trial. Motions as filed by the HCF and MSMA were denied.

Dr. Benoit indicated that the HCF is still struggling with the Internal Review Department trying to have its categorization changed to a more favorable one.

He indicated that their Board is concerned about the manner in which panel review members and the members of the Central Coordinating Committee are to be selected. The HCF Bylaws Committee is charged with coming up with revised bylaws which will spell out how these members are to be selected. Dr. Benoit requested MSMA input into this effort. He stated that, originally, the M.D. panel review committee members were selected by the Councilor in their own district suggesting names, and Board members have been selected by the administrative members. Dr. Benoit indicated that this too has been challenged. He said that he felt there was some merit in the objections that the participating members really have no voice in the voting of the organizational structure as it currently exists. Dr. Benoit indicated that he feels the State Association should suggest the mechanism whereby such committee members, etc. are duly elected and/or appointed. He said that there should be some elections held at the end of this year. He said he would welcome any pertinent thoughts that the Council might have as to how to change the bylaws to make the voting more democratic. He stated that at the inception of the Health Care Foundation, many appointments were made and he felt that to continue this approach would be unwise.

Dr. Cope indicated that he felt three members of the Council should be selected to see what they could suggest and report in December.

After brief discussion, a motion was made and seconded that an advisory group from MSMA be appointed to assist the Bylaws Committee of the Health Care Foundation to suggest a new set of Bylaws that will make more democratic the election of panel review members and Central Coordinating Committee of the HCF and that the expenses of this advisory group be met by MSMA. Motion carried with one dissenting vote.

The question was raised regarding input from the Missouri Association of Osteopathic Physicians and Surgeons. Dr. Benoit stated that they are happy with the way selections are made now.

Dr. Benoit indicated that the financial needs for the continuing operations of the HCF are paramount at the present time. We are courting complete disenchantment with lack of staff and little financial help. Dr. Benoit stated that this summarized his report.

Dr. Hetlage questioned Dr. Benoit about what type of control the federal government might have if a grant were received. Dr. Benoit stated that, basically, all federal programs are the same. The only strings attached are that you have to demonstrate that the program is worthwhile and that you provide summary reports and evaluations at certain specified intervals. He stated that they may insist on consumer input. It was indicated that possibly the Foundation might lose a good percentage of its members if a federal grant were received.

Dr. Hansbrough asked whether all specialty groups had sent in guidelines for their specialties. It was stated that all had done so with the exception of family practice and urology.

Dr. Bradshaw asked if there were any other avenues of funding available. Dr. Miller said that they have explored every conceivable avenue of fiscal support. Basically, we felt that this Foundation, and this was supported by the existing Board, should be the responsibility of medicine. However, we felt it unwise to ask for an assessment to finance the Foundation. Although originally it was felt that physicians participating should possibly be paid for their time, we found rather hastily that this was not fiscally sound.

Dr. Miller went on to indicate that he felt there are only two alternatives—either go to the constituents and say we need more of your time and money or go to the federal government. He stated that all present give many dollars to the federal government each year and asked if they want any money back for something worthwhile. Everyone has said, "Yes. This is worthwhile. It needs to be done." If medicine doesn't do it, it isn't going to be done right. Let's don't walk away from this meeting today bankrupting this effort.

Dr. Benoit stated that he felt any attempt to get physician dollars into this is virtually impossible. He said that he does not feel that you can get physicians of MSMA to support this with an assessment. If we are successful through RMP, we are still 12 months away from getting any money. Dr. Benoit reported that he would like to have seen them operate under private funds. However, this did not pan out.

Dr. Bradshaw asked if the large Foundations had been approached for funds for the HCF. Dr. Benoit stated that under the present IRS classification of the HCF, these foundations would have to account for any funds they might give us. They do not want any part of that accountability. As indicated earlier, we are trying to have this rating changed.

Dr. Hetlage indicated that he felt the Council should take a vote on the HCF situation and made the following motion: "Move that we, as a Council, approve of the Health Care Foundation's efforts to seek additional financial help through government support." Motion was seconded. More discussion followed regarding the possibility of the Health Care Foundation seeking federal funds.

Dr. Franklin indicated that at the last meeting of the Council of the St. Louis Medical Society, it again was voted not to approve federal grants for the HCF. This was in accordance with the vote which had been taken a year or so ago and they still feel the same way.

Dr. Martin stated that it is his tax money that is up in Washington and he would like to get some of it back. He indicated that he felt that he would have to discuss this situation again with his constituents to find out where they stood.

Dr. McAlhany said that he felt his district would not buy seeking federal funds and moved that the matter of federal funds for the HCF be tabled until the December meeting to give the Councilors a chance to take it back to their membership. Motion was seconded and failed by a vote of five in favor of tabling and six against.

Dr. Bradshaw indicated that he also felt that the Councilors must make every effort to go back home and sell this.

Dr. Matthews stated that he felt it was not a matter of whether or not we are going to have federal funds, but whether it will be now or later. The important thing is, should we approve this now?

Dr. Mayer said that he has had a lot of experience dealing with the federal government and stated that the federal government does set down certain rules by which you are to abide if you get certain federal funds. If you feel you can abide by these rules, you accept the money. If you cannot go along with what they want, you don't accept the money.

Dr. Miller suggested that, possibly, the Council could approve federal funding of the HCF, providing that the premise of that funding be submitted to the Council for review. Dr. Benoit indicated that they are perfectly willing to report back to the Council, but it should become apparent that they cannot turn back to the two-parent organizations for everything.

Discussion ceased on the HCF and Chairman Cope called for the question on the motion on the floor: "Move that we, as a Council, approve of the Health Care Foundation's efforts to seek additional financial help through government support." Motion was seconded and carried by a vote of nine to three.

Dr. Bradshaw moved that the Health Care Foundation continues to seek other means of support as well. Motion was seconded and carried.—**Referred to Resolutions Committee.**

■ Dr. Benoit stated that he would like to make two other, unrelated comments. He stated that the *Jackson County Medical Society Bulletin* reprinted verbatim the presentation Dr. Howard gave at the AMA House, "What Is the AMA Doing?" He indicated that he felt this was one of the best things he had read and hoped that the Editorial Board of the MSMA Journal would be willing to print it in Missouri Medicine.

Dr. Benoit referred to the resolution introduced in the last MSMA House regarding Council Chairmanship. This resolution indicates that a change be made so that the Chairman of the Council could represent the entire state membership rather than his district and have another councilor from his district. He also indicated that according to the Planning Committee's report, the Immediate Past-President would be eliminated from the Council. Dr. Benoit stated that he felt that even though the Chairman of the Council would serve as a ranking officer of the Association, his main interest would still be with his own district. He said he felt a big mistake would be made if this was passed.—**Referred to Reports of Officers.**

DIRECTOR OF THE DIVISION OF HEALTH

■ Dr. Domke indicated that the MSMA Council has addressed itself to the problem of an effective program for the control of Venereal Disease. The State PTA, Department of Education, Division of Health, MAOPS and the MSMA are cooperating to come up with an effective educational program. Workshops are being planned for leaders of PTA organizations and they will need active support and participation of physicians in every area in this state. The Missouri Board of Health has endorsed this program.

Dr. Domke then indicated that the MSMA, at its Kansas City meeting, expressed itself by resolution as being interested in the matter of having medical expertise contributed to environmental health matters. The Board of Health also has expressed itself in the same way. He stated that a joint Senate House committee is reviewing what should be done by legislation to put into effect the recently passed constitutional amendments and welcomes any suggestions as to what should be done in regard to environmental concerns.—**Referred to Miscellaneous Affairs Committee.**

■ Presently, Comprehensive Health Planning is in the Department of Community Affairs which is directly under the Governor's Office. This is true in about half of the states. In the other states, CHP is associated with the Health Department. He indicated that he was not saying that it should be transferred to the State Health Department. It is true, however, that the administrative unit in the Governor's Office to which CHP was assigned appears to have been disbanded by the constitutional amendment.

The Little Hoover Commission has recommended that censing boards be placed under what was originally to e the Department of Agriculture and Community Afairs, but now is to be called the Department of Comunity Affairs, Regulation and Licensing. It seems to imly that there would be some common staff that would erve these different boards. The Board of Health invited e attention of the various health manpower licensing oards to this recommendation and are calling these ings to your attention so that recommendations can be ade to this joint Senate-House Committee if you desire.

As one important component to emergency medical ervices, the Board of Health has given high priority to gislation for ambulance regulation. Dr. Domke stated at we have seen the development of improved ambunce service in recent years, although some of the outate areas are in trouble. Hopefully, more support will e received for the bill during the next legislative session.

The Division of Health is undertaking a program audit r funds distributed by the Health Department for the pport of local health units. Some $2 million is distribted each year to the local health units. An auditing proram is being undertaken to determine and evaluate hat this money is doing. What this amounts to is an exansion and improvement of our audit procedures.

Dr. Domke said that he stated at the last Council leeting that he hoped to have information regarding hysician and health manpower in Missouri at this time. e passed around a copy of the printout containing this formation, numbers, where they are located, etc. He dicated that he would not review the entire table. They o hope to publish this and, possibly, in the MSMA urnal.—**Referred to Resolutions Committee.**

REPORT OF COMMISSION ON CONTINUING EDUCATION AND HEALTH MANPOWER

Dr. Ladyman, Chairman of the Commission, gave the llowing report on various activities of the Commission n Continuing Education and Health Manpower and sevral of its ad hoc committees.

He presented the Council with a resolution on nursing uties, indicating that it had been accepted by the Nursg Association, the Ad Hoc Committee on Health Manower and the Hospital Association and that he was eking Council approval.

Dr. Hansbrough called attention to the second page f the resolution. At the top of the page, it indicates Registered" professional nurses. He stated that since is does include licensed practical nurses, he felt the ord "registered" should be deleted. Dr. Ladyman indiated that there was no objection to this.

Dr. Ladyman then gave a brief progress report on the ilure rate of foreign physicians taking the state boards. everal AMA tables were distributed to the Council rearding how Missouri ranks with other states in this reard. These figures were for the year 1971 and showed failure rate in Missouri of 18.8%. For foreign gradutes, this failure rate was 20.9%. He stated that in comarison to other states who examined approximately the me number, we must be a little easier than the rest. orty-two states show no reciprocity for foreign gradues. Apparently, most of this is on an individual basis.

Dr. Mayer stated that it was his understanding that in e case of foreign graduates, they will accept them for eciprocity if they are boarded or board qualified or have raduated from an AMA approved program.

Dr. Ladyman spoke of the legal aspects of people dog emergency care in hospitals. The only information available right now are the 1966 guidelines set by the AMA. As of Jan. 1, 1973, they will publish new guidelines as to the legal implications of these people performing this task. He indicated that he would like to delay this until that time.

He stated that the turnout for the Continuing Medical Education workshop held in June at Columbia was not the best, but it was a fine educational program. They had several speakers who have been in the business for a long time. He stated that he felt the Committee really learned from it. This is in Phase I of the Program trying to identify needs and methods of administration. They are hoping to use the Health Care Foundation, possibly through its peer review mechanism input, to try to identify the needs in the different areas of the state. This was a worthwhile meeting.

Mr. Fox then reported for the Ad Hoc Committee on the 115th Annual Session. He stated that 23 separate sessions are planned. Both the Heart Association and the Cancer Society have agreed to sponsor sessions again this year. There will be two general sessions and the rest of the sessions will be sponsored by the various specialty groups in the state.

On motion of Dr. Matthews, duly seconded, the Council voted to commend Dr. Kinsella and the members of his committee for the splendid program they presented last year and to give full support for the forthcoming session. Motion carried.

Dr. Miller asked why OB-GYN was not sponsoring a session during the meeting. Mr. Fox indicated that letters were sent to all specialties and apparently no reply was received from them.

Mr. Fox reported on a meeting sponsored by the Missouri Extension Division on Rural Health which he attended. We were invited as a guest. Practically every organization was represented—Industrial Commission, Small Business Administration, etc. Almost the entire meeting was taken up with discussion of the problems of rural health and the federal bills now pending.

On motion, duly seconded, the report of the Commis-

President Walter T. Gunn *(right)* presents a special plaque of appreciation to Dr. Joseph V. Finnegan of St. Louis, who has served as Editor of MISSOURI MEDICINE since 1961.

sion on Continuing Education and Health Manpower was accepted. Motion carried.—**Referred to Medical Education and Public Welfare Committee.**

REPORT OF AMA DELEGATES

■ Dr. Neilson reported on the AMA meeting held in San Francisco in June. At the meeting, the concept of a physicians' union was vigorously attacked, representation for medical students was approved and the results of the first AMA membership poll were presented. The House of Delegates acted on 59 reports and 130 resolutions.

In his inaugural address, Dr. Hoffman, AMA President, made a plea for unity, but attacked the cry for unionism in the medical profession. It is estimated that 3,500 physicians now belong to unions or guilds. *Medical Economics* polled physicians and found that 60% of them believed that the profession should organize.

On a related issue, Dr. Hoffman said that peer review was initiated by the profession and it would be tragic and a dereliction of duty if we were to surrender that initiative to others. He indicated that *"Peer review is an idea whose time has come."*

The House received the results of the first membership opinion poll. Of the 94,000 respondents, 73% felt that the AMA should continue to try to keep the basic principles of private practice in any federal health program and 55% preferred the AMA's Medicredit plan of national health insurance to any other.

AMA programs that the members felt were not receiving enough emphasis were communications to the public, practice-management problems and socio-economic issues.—**Refererd to Resolutions Committee.**

■ The House approved a policy opposing employment of physicians' assistants in hospitals.

Guidelines were adopted for compensating physicians for the services of physicians' assistants. A Missouri resolution encouraging legislation at the state level which would place control of the physicians' assistant and physicians utilizing such services under state boards of physician licensing was referred to the Commission on Health Manpower for implementation.

The House established a Liaison Committee on Graduate Medical Education and a Coordinating Council on Medical Education.

The House adopted the following statement on marihuana: "This AMA House of Delegates does not condone the production, sale or use of marihuana. It does, however, recommend that the personal possesion of insignificant amounts be considered at most a misdemeanor, with commensurate penalties applied."—**Referred to Miscellaneous Affairs Committee.**

■ The Delegates adopted a strong resolution condemning attempts to fix physicians' fees by third-party payors in response to actions by Aetna Life and Casualty Insurance Company.—**Referred to Resolutions Committee.**

■ Bylaws changes gave medical students membership in the AMA and representation in the House of Delegates.

The House approved acceptance of a new contract with the Fireman's Fund Insurance Company to continue the AMA Group Disability Insurance Program.—**Referred to Constitution and Bylaws Committee.**

■ The two resolutions introduced by the Missouri delegation at the direction of the MSMA House of Delegates were adopted in amended form. One resolution regarde physicians' assistants and the second concerned the Pr priety of Professional Public Communications.

A new national project leading to the certification physicians' assistants is being undertaken by the AM and the National Board of Medical Examiners. The in portance of developing an examination for such a ne and evolving occupation as the physicians' assistant wa emphasized. The joint proposal recommends creation b the AMA of a national advisory body on certification o physicians' assistants, to counsel the AMA and the N tional Board regarding general policy decisions about th certification program.—**Referred to Miscellaneous Affai Committee.**

■ A tribute resolution was introduced into the House b the Missouri Delegation. Copies of the resolution will b sent to Dr. Wendell Scott's family.

Dr. Washburn sent a fine report to the Council, Offi cers, AMA Delegates and Alternates regarding a sum mary of the discussions before the AMA Council on Lon Range Planning and Development at the AMA sessio in June regarding proposed changes in the AMA organ zational structure and activities.

Dr. Neilson indicated that much hard work and effo paid off as Dr. Vernon Wilson was reelected to the Cou cil on Medical Education and Dr. Hector W. Benoit wa elected to the Council on Medical Service for a one-yea term. Dr. Neilson reported that both he and Dr. Beno chaired reference committees.

Missouri Congressman Durward Hall was properly re ognized for his service to government, his constituen and the entire medical profession.

Dr. Neilson thanked the officers and staff for their e forts at the AMA meeting and commended the Delegat and Alternates for a job well done. He stated that th delegation has been very effective this year and aske that the Councilors reassess AMA and bring positiv constructive thinking to the delegation so that Missou may continue to be among the leaders of the 50 constit ent delegations.—**Referred to Reports of Officers Com mittee.**

■ Dr. Hansbrough brought up the subject of the Ke nedy Bill (S-3327) and indicated that the press carrie a story indicating that the AMA had declined invitatio to testify on the bill before the Senate Health Subcon mittee. He said that he was aware that possibly we ha testified earlier, but felt that this was Mr. Kennedy's wa of using the AMA. Dr. Hansbrough indicated that an time a legislator requests the AMA to testify, we shoul be there to do it. He stated that he felt a letter should b written to the AMA indicating our concern of this ma ter.

Mr. Smith indicated that he was quite sure the AM did testify before the committee in its first round.

Dr. Matthews said that possibly there were some e tenuating circumstances for their not appearing. Ther are reasons at times for not testifying.

On motion, duly seconded, the AMA Delegates' repo was accepted with commendation. Motion carried.

REPORT OF AMA

Mr. Mortenson indicated that much time was spent o the Kennedy HMO Bill, Senator Kennedy wanted quic Senate action. AMA and state societies have been seekin to delay the bill and this has made Senator Kennedy u

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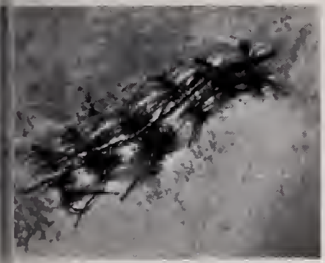

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Contraindications: Glaucoma, obstructive disease of the gastrointestinal tract, obstructive uropathy, intestinal atony, toxic megacolon, hiatal hernia associated with reflux esophagitis, or unstable cardiovascular adjustment in acute hemorrhage.

Warnings: Patients with severe cardiac disease should be given this medication with caution.

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Adverse Reactions: Varying degrees of drying of salivary secretions may occur as well as mydriasis and blurred vision. In addition the following adverse reactions have been reported: nervousness, drowsiness, dizziness, insomnia, headache, loss of the sense of taste, nausea, vomiting, constipation, impotence and allergic dermatitis.

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*Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. Also, mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (> 5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules.

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ppy. Contrary to the Senator's statement, the AMA's
ews were presented to the subcommittee last fall. It
bmitted a written statement reiterating its position
hen scheduling difficulties ruled out a personal appear-
ce.

Mr. Mortenson stated that they have had a good re-
onse to the AMA excess major medical insurance pro-
am. This program can be coordinated with any pro-
am which the member now has and the cost is very
w.

He also stated that AMA negotiations with Aetna have
en successful. We reached no definite deal, but we
ve reached an agreement.

Mr. Mortenson reported that his three priorities for the
MA are (1) politics, (2) keeping state societies in-
rmed and ourselves informed on legislation and (3)
MA membership. He stated that the AMA has been
ncerned about complaints regarding the lack of re-
onse, etc. and indicated that one individual is now in
arge of taking care of these complaints. He is David
eihaupt. He further stated that they would be happy
furnish speakers occasionally for county society meet-
gs.

LETTERS TO AMA

Dr. Hansbrough read a proposed letter to the AMA re-
rding the AMA's failure to appear at a Senator Ken-
dy Subcommittee meeting as had been requested by
e subcommittee. It was agreed that the letter be sent
the A.M.A.—**Referred to Resolutions Committee.**

OPHTHALMOLOGISTS

A proposed letter to Dr. Schertz was read. This letter
ncerned the ophthalmologists proposing legislation for
ysicians' assistants. A motion was made that the pro-
sed letter be sent to Dr. Schertz. Motion was seconded
d carried.

UROLOGISTS

A proposed letter that was to be sent to Dr. Mebust,
esident of the Kansas City Urological Society, was
ad. This letter concerned the Kansas City Urological
ciety's request that they be designated to represent the
ologists of Western Missouri at the state level.

Motion was made that this letter be sent to Dr.
ebust. Motion was seconded and carried.

Another letter was read that was to be sent to the
esident of the Missouri Federation of Urologists in-
rming him of the decision reached regarding the re-
est of the Kansas City Urological Society.

Dr. Stricker moved that this letter be sent to the Presi-
nt of the Missouri Federation of Urologists. Motion
s seconded and carried.—**Referred to Miscellaneous
fairs Committee.**

ACUPUNCTURE

Dr. Chandler moved that the following resolution re-
rding acupuncture be adopted and sent to the State
ard of Registration for the Healing Arts.

"WHEREAS, The practice of the ancient Chinese art of acupunc-
re and the Japanese art of shiatsu are attracting renewed atten-
n in both medical and nonmedical circles, and

WHEREAS, Various scientific agencies and institutions are cur-
ntly studying and investigating all aspects of acupuncture and
iatsu, including its possible utilization in the prevention and/or
atment of human disease, illness or other physical or mental
normalities, and

WHEREAS, The prevention and treatment of human disease,
ness or other physical or mental abnormalities clearly con-
tute the practice of medicine, therefore, be it

Resolved, That the Missouri State Medical Association urge the Missouri State Board of Registration for the Healing Arts to utilize such legal and statutory powers as may be available to declare that the principles apparently involved in the practice of acupuncture and shiatsu are medical principles and that acupuncture and shiatsu, if found to be scientifically valid and medically beneficial, would fall under the definition of the practice of medicine."

Motion was seconded and carried. It also was suggested that a news release be sent out regarding this matter. **—Referred to Medical Education and Public Welfare Committee.**

REPORT OF THE WOMAN'S AUXILIARY

■ Mrs. Jones introduced Mrs. Charles Willman, St. Joseph, President-Elect of the Woman's Auxiliary. Mrs. Jones indicated that Missouri will be host from October 18-20 to the North Central Regional Workshop.

Mrs. Jones stated that the Fall Conference of the Woman's Auxiliary would be held on October 24-25 at the Ramada Inn in Columbia. The program on the afternoon of the 24th will consist of a panel discussion on legislation and politics. That evening, the Auxiliary will join with the Fifth Councilor District meeting in having a benefit dinner for the Missouri State Medical Foundation. Speakers for the dinner will be Dr. Walter Gunn and Mr. Roy Pfautch, President of Civic Service, Inc., who will speak on "Practical Politics." The second day of the Conference will be a health education day. Mrs. Jones stated that she would like to thank Drs. William Bradshaw, Paul Young and Gerald Miller for their time and assistance in planning the Health Education Day. She also stated that 70 state organizations had been invited to join them.

Mrs. Jones stated that she hoped that a small room in the MSMA's new building could be set aside for the Auxiliary to store their archives.

Mrs. Jones stated that in keeping with the AMA's request that the women get involved in politics, the Auxiliary state legislation chairman had arranged for Mr. Royal O. Cooper to speak before the Jackson and Jasper County Auxiliaries and she hoped that he also could visit others.

Mrs. Jones indicated that Missouri was low in the list for AMA-ERF contributions. She indicated that there was a remedy for this. She stated that if possible, the Auxiliary would like to be given credit for all contributions in the state. Mr. McIntyre stated that he had checked into this matter with the AMA and that he was in full accord with this. He also indicated that everyone who gave a contribution would receive credit for it and that the Woman's Auxiliary would get credit for the total amount of AMA-ERF contributed throughout the state Mr. McIntyre stated that this would require official action by the Council.

Dr. Gunn moved that this policy for accounting for AMA-ERF funds be adopted. Motion was seconded and carried.

Mrs. Jones stated that she hoped that everyone is reading the Auxiliary page in MISSOURI MEDICINE. She also indicated that she and Mrs. Willman appreciated being invited to the meeting.—**Referred to Reports of Officers Committee.**

■ Dr. Miller reported that the Ad Hoc Family Planning Committee would present a short report at this time and present a more complete report at a later date. The Committee's report consists of the following four recommendations:

1. We recommend that due to the divergence in nature of the clinics, local medical societies and/or local physicians be urged to take a more active role in the establishment and operation of family planning clinics.
2. We recommend frequent appraisal of each clinic's programs as to its continued effectiveness and in its respect for medical ethics.
3. We recommend frequent appraisal of the clinic's programs in such areas as number of patients reached and costs-per-patient.
4. And, we recommend frequent appraisal of the clinics as to the extent they are invading the private practice of medicine.—**Referred to Miscellaneous Affairs Committee.**

■ Dr. Miller recommended that Drs. Gulick, Chandler and Cope act as Council representatives advisory to the Health Care Foundation's Constitution and Bylaws Committee. This action had been requested on the previous day.—**Referred to Resolutions Committee.**

■ Dr. Miller next reported on his experience as a member of the Missouri University President's Advisory Council for Health Related Professions. He indicated that he had been appointed to this committee two or three months before the completion of his term as President. The first meeting of this committee was held in June and was well attended by representatives from the various health professions. Dr. Miller indicated that he had asked that Dr. Gunn, as President of MSMA, be invited to attend these meetings, but that President Ratchford had asked that he attend the meeting in June. Dr. Miller indicated that a delightful program had been presented and that the first meeting had been extremely well received by all those present. Dr. Miller stated that certainly MSMA needs to be represented and thought that Dr. Gunn needs the exposure and full privilege to attend. President Ratchford felt that some continuity was needed so far as effectiveness is concerned.

Dr. Gunn then requested that Dr. Miller continue in this capacity as a member of this Advisory Council.

Dr. Hansbrough moved that this report be accepted. Motion was seconded and carried.—**Referred to Reports of Officers Committee.**

MISSOURI HEART ASSOCIATION

■ Dr. Hugh Stephenson, Chairman of the Cardiopulmonary Resuscitation Committee of the Missouri Heart Association, indicated that the Missouri Heart Association is submitting a grant application proposal to the Missouri Regional Medical Program to develop an intensive statewide training program in cardiopulmonary resuscitation. This program is not only designed for hospital personnel, but for all other emergency oriented people.

Dr. Stephenson said that the Heart Association has had a cardiopulmonary committee for some years. Several years ago, the committee sent out a survey to hospitals asking what is being done as far as record keeping is concerned on resuscitation attempts. He indicated that 70 hospitals did not as yet have any effective record keeping system on resuscitation attempts. Dr. Stephenson stated that he felt it was the obligation of his committee and medicine at large to see that appropriate applications of cardiopulmonary resuscitation were made. He stated that, perhaps, through the grant we can make a contribution. He indicated that we need to know just what is being accomplished and he doesn't believe anyone can say that the programs have achieved a specil degree of success.

Dr. Stephenson stated that this committee would lil to have the encouragement and the backing of MSMA.

Dr. Hetlage moved that we endorse and support th project. Motion was seconded by Dr. Miller and was ca ried.

CENTRAL METHODIST COLLEGE MANPOWER PROJECT

Dr. John Smart of Central Methodist College, Fayett presented a community-based educational manpow project in rural Mid-Missouri that the college wants implement.

Dr. Smart stated that he had researched the manpow problem in rural Missouri and that one main area of co cern is the shortage and maldistribution of allied healt manpower. He indicated that funding would con through HEW and Missouri Regional Medical Program.

Dr. Smart stated that this project is conceived as quasi-experiment in the more effective organization an cooperation of community-based institutions of high education and of professional health service. The proje will demonstrate ways of coordinating and cooperatir procedures, facilities, faculties and professional personn among these institutions which share concerns and r sponsibilities for the more effective recruitment and pre aration of allied health professionals to meet local nee and for facilitating professional and sub-professional a pirations at the local level. The community-based con prehensive educational programs of the project will me more effectively the demonstrated health manpow needs of the ten and one-half county Mid-Missouri rur area that will participate in the project. All the educ tional institutions in this project plan to develop and e tablish programs which will (1) expand health caree education opportunities for people of the area; (2) arti ulate and formulate effective linkages with all establishe training programs in the area (both sub-professional an professional levels); (3) significantly increase the nur ber of appropriately educated allied health professional and (4) provide for maximum vertical mobility betwee professions and sub-professions. Dr. Smart indicated th they had received endorsements from various health re lated organizations.

After hearing Dr. Smart's report, it was moved that th Council approve in principle the ideas which he presen ed. The detailed program will be submitted to our Con mission on Continuing Education and Health Manpow for study and subsequent report. Motion was seconde and carried.

REPORTS OF DEANS OF THE MEDICAL SCHOOLS

Dr. M. Kenton King of Washington University Med cal School reported that enrollment in Washington Uni versity had increased considerably. He indicated th within three years, there will be about 480 students i the school of medicine.

Dean Mayer of Missouri University reported that 11 new medical students had entered school in Septembe and 104 of these were Missouri residents.

Dr. Mayer stated that he had just learned that D George Ulett had resigned as Director of the Division o Mental Diseases and stated he would like to present th following suggestion that could be adopted as a resolu tion by the Council and be sent to Dr. Ulett:

> The MSMA Council, having recently been informed of th

ignation of Dr. George Ulett as Director of the Division of ntal Diseases of the State of Missouri, wishes to express to . Ulett the sincere appreciation of the Missouri State Medical ociation for his efforts over the last decade in improving the ntal health programs of the State of Missouri.

Dr. Miller moved that the above be adopted and sent Dr. Ulett. Motion was seconded and carried.

Dr. Mayer stated that in keeping with his approach d that of Dr. Wilson of keeping the Council informed any issues in which they are involved, he would like present an issue and seek the approval or opinion of e Council before implementing it. This issue relates to viding joint training for individuals in child psychiatry d working with the Kirksville College of Osteopathy. is program would be run conjointly in the facilities of medical school and the Warren Hearnes Child Devel- ment Center in Fulton. Dr. Mayer pointed out that the IA and others have approved of osteopaths coming in- AMA approved programs. No objections were raised.

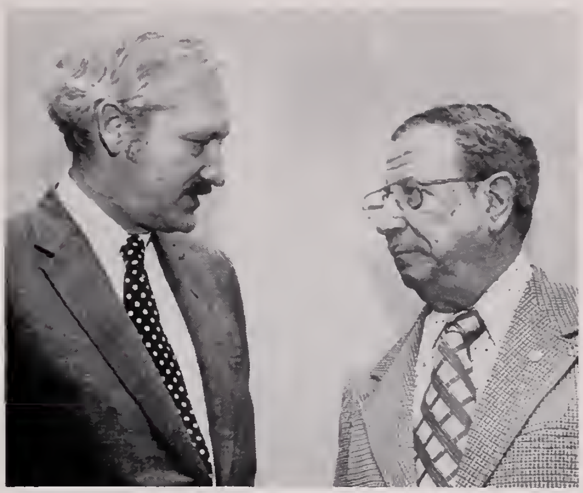
Dean Mayer indicated that he had recommended to ancellor Schooling that the policy of requiring referral patients to the University Hospital by practicing phy- ians should be expanded to state as follows:

"Any person requesting medical care, special study or gnosis may be admitted to the University Hospital. dmission may occur by direct request of a patient, by erral of a licensed physician or through such other eans as deemed appropriate under such rules and regu- ions as may be adopted."

Dean Mayer further pointed out that no change in this licy had as yet been made in that he wanted to make re that the Council of the Missouri State Medical As- iation had no objections to the change before it was plemented. No objections were raised by the Council.

Dean Noback stated that there were three things that wished to speak to:

1. He indicated that the Kansas City Medical School had 72 new students in year one and 12 new students in year three.
2. Dr. Noback indicated that General Hospital in Kansas City would be replaced by a new facility.
3. He next spoke to the school's application for an area health education center in western Missouri under the program supported by NIH through the Bureau of Health Manpower Education. Dr. Noback stated that in the latter part of June, the deans of all M.D. and D.O. schools in the country received a letter from the Bureau of Health Manpower Education stating that funds would be available to develop health education centers. He indicated that these centers would be based in medical schools and a consortium of institutions in some geographic portion of a state. He stated that he had discussed this with area hospital and health institutions and a letter of intent was filed that they were interested in developing such a center. Their letter was viewed as one of those that was meritorious. He indicated that he had been in contact with people in Springfield, St. Joseph and Columbia and that there is a substantial interest on the part of physicians, hospitals, nursing schools and educational institutions in cooperating in developing such a center.



Dr. R. Allen Chandler *(left)*, Seventh District Councilor, and Dr. Max S. Franklin, Third District Councilor, were elected Chairman and Vice-Chairman of the MSMA Council at the meeting on April 1.

Dr. Noback stated that the intent of their proposal is bring those in the western part of Missouri into closer mmunication and, over the years, they can plan realis- ally to improve our ability to support continuing edu- tion programs for all in the health manpower field. Dr. bback stated that the response to the application is not yet known, but that it should be known by the end of this month. Dr. Noback indicated that a substantial number of dollars would be involved and the federal program calls for level funding for each of five years.

Dr. George Thoma of St. Louis University stated that their school had 153 new students this fall. He indicated that one-third of the members of the class are Missouri residents. He said that there are several disadvantaged students. He indicated that a bridging course had been held last summer to help prepare some of these disadvantaged students for medical school. The program covered matters of study habits and refresher courses.

Dr. Thoma indicated that with their expanding enrollment and limited clinical facilities in their own hospital, they were having to rapidly expand their affiliation program with private and tax supported hospitals.—**Referred to Medical Education and Public Welfare Committee.**

REPORT OF COMMISSION ON MEDICAL ECONOMICS

■ Dr. Peterson, Chairman, stated that Mr. Proctor Carter and Mr. Ed Singleton of the Division of Welfare had attended the Commission meeting held on June 29. Mr. Carter had reported that nursing homes had recently been audited by federal auditors. The auditors observed 118 patients in ten nursing homes and, in their opinion, 67% of these patients may not have needed to be in the nursing homes. Mr. Carter had requested reexaminations of the patients. Mr. Carter also reported that he hoped to return physicians' reimbursement for Medicaid services rendered to the June, 1970 schedule.

Dr. Peterson reported that a physician reimbursement problem under Medicare had been referred to his Commission. The problem occurred when a patient of a physicians' group complained to the SSA that the group had refused to furnish an itemized bill for approximately $45.00 that would enable him to receive reimbursement. Subsequently, the group did furnish an itemized bill that was adequate for the patient to receive payment.

The HEW intermediary manual provides that "a patient's statement or a Social Security Office report may indicate that an attempt was made to obtain an itemized bill from the physician, but the physician refused to furnish the bill until it is paid. The carrier should then contact the physician or, if necessary, the local medical society in an effort to resolve the problem. If appropriate, the carrier may suggest the beneficiary file a grievance with the Society."

Voluminous background material was presented to the Commission concerning the methods of reimbursements under Medicare and available options. It appears that the real question involved is, "Is it the right of the physician or is it the right of the patient to determine the method of reimbursement for services rendered under Medicare?"

After discussion, on motion, the Commission recommends that the selection of alternative methods of collecting charges from the Medicare patient is the responsibility of the treating physician and that the patient should not have the option of demanding direct payment to himself for a physician's services. Dr. Peterson indicated that the Commission felt the whole problem of third party payments needed to be studied and an ad hoc committee, chaired by Dr. Heeb, was formed to study this problem and report its recommendations at the next Commission meeting.

Dr. Peterson next reported on the setting up of an organization for negotiation of professional fees. He stated the committee had researched this and had decided to set this up as a department of economic affairs within the framework of MSMA. He indicated that they had received advice not to set up the organization in this manner. He said that the committee had made a change of direction and would now set up the organization outside of the official structure of MSMA with its own Constitution and Bylaws and operating rules.

Dr. Peterson stated that the Illinois State Medical Society had recently published a pamphlet entitled "Medicare Misconceptions" and offered it for sale to its members so that they could give them to their patients. It has been a tremendous success and the Illinois Society has granted permission for all state medical associations to reprint this pamphlet. Dr. Peterson indicated that the Commission felt that this pamphlet should be reprinted and offered for sale to MSMA members.

Dr. Cope stated that the negotiation for fees organization would be similar in construction to MMPAC and that in approving the report, we would be confronted in the future with such an organization.

Dr. Hetlage moved approval of the entire report. Motion was seconded by Dr. Martin and carried.—**Referred to Resolutions Committee.**

REPORT OF COMMISSION ON PUBLIC AFFAIRS

■ Dr. Bowles, Chairman of the Commission, reported that he had a good Commission again this year, and that several items had been considered at a recent commission meeting.

Dr. Bowles reported that one of the issues of prime importance discussed was that of emergency medical services. He reported that on August 28-29, the Governor's Advisory Council on CHP held a meeting on emergency medical services. The meeting was held to discuss the need for providing adequate emergency care in Missouri. As a result of the meeting, a good provisional report had been written. Dr. Bowles asked permission that Dr. Allen Klippel be asked to appear at the December Council meeting to go over this report. Dr. Bowles mentioned that Senate Bill #508, which provides for the standardization and high quality of emergency care vehicles and
attendants, would be in the General Assembly next
sion and he would appreciate support for this bill.

Dr. Bowles indicated that there had been considera
discussion on VD education. He stated that he had
tended a meeting on July 19, with Dr. Bob Taylor of
Department of Education; Mrs. Leroy Schulenberg, P
ident of the State PTA; Mr. Ray Bly of the State
partment of Health; and Mr. Swarens. As a result of
meeting, it was decided to embark upon a renewed ef
toward stimulating VD education. A series of appr
mately 18 workshops are being planned over the st
under the sponsorship and cooperation of the Dep
ment of Education and the Department of Health for
officers and leaders of state PTA organizations w
MSMA providing physicians to handle discussion
medical and technical matters. An ad hoc committee c
sisting of Drs. Orgel, Hungate and Neilson was appoi
ed to study the possibility of physicians speaking at th
conferences. As a result of these conferences, it is ant
pated that the information received by the PTA lead
would be brought back to local school authorities
that these groups would cooperate in instituting a uni
type of VD education in schools.

The next item the commission discussed was the P
lic Affairs Conference. Dr. Bowles stated that despite
excellent programs, there had been a drop in attendan
The commission considered the possibility of dropp
the conference. After discussion, it was decided to c
tinue this project. The commission also indicated to
Councilors that possibly in some way, they could u
their county society officers to attend this conferen
There also was a suggestion at the commission meet
of combining the Woman's Auxiliary meeting with
Conference.

Dr. Bowles reported on the Mini-Estes Confere
that will be held on March 1-2, 1973. A similar conf
ence was held last year and was quite successful.
Bowles said that he attended a planning meeting for t
conference on July 22. He indicated that he would l
financial support for this conference, if needed. He sta
that the theme for this year's conference would be "P
lic and Professional Accountability for Health Care S
vices."

Dr. Bowles reported that Resolution #33 had been
ferred to the Commission. This resolution was concer
with the creation of a Pediatric Coordination Council
Missouri. The Council would be composed of represen
tives from various organizations, including the MS
The Commission recommends support for this Cou
and also recommends that Dr. Donald Blim of Kan
City be appointed to represent the MSMA.

Dr. Bowles requested suggestions for members of
ad hoc committees. He stated that he had received s
gestions from Jackson County.

Dr. Bowles stated that even though MSMA is not m
ing headlines in its efforts against drug abuse, our h
is being felt in the overall educational effort. He also
dicated that despite the public clamor for action on d
abuse, alcoholism remains far and away the greater pr
lem.

Dr. Bowles reported that the CHIP program was p
gressing and asked that Dr. Rikli be invited to the D
cember meeting to give a progress report.

Dr. Bowles reported on a request for approval of
medical program from the Missouri Municipal Leag
After consideration, the commission decided that MS
should serve in an advisory capacity and the MSMA st
should keep the Municipal League informed on hea
matters of mutual concern.

Dr. Bowles next spoke about mobile X-ray units. He licated that the HEW, FDA, ACCP and the ACR had ued a joint statement recommending the banning of bile X-ray units. The commission felt that they did not ve enough information on this matter and would report this at the December meeting.

Dr. Hetlage moved that the report be accepted with mmendation. Motion was seconded and carried.

Motion was made to appoint Dr. Blim to the Pediatric ordination Council and to give financial support to the 73 Mini-Estes Conference. Motion was seconded and ried.

COMMUNICATIONS CLINIC

Dr. Stricker reported on the Communications Clinic ld on August 28-29 in Chicago. Some of the clinic as, which could be considered by the MSMA, includ- a legislator's interview program, a News Media Code d a special venereal disease education program.

The legislator's interview program would be done by news reporter with individual lawmakers on health- ated bills which are under consideration. Television es of the interview would be sent to stations in that maker's district. The cost would be about $175 a ek during the legislative session. The News Media de, developed jointly by physicians and media repre- tatives, establishes certain guidelines in reporting alth-related news. A special VD education program ried out by New York Medical Society offers an eco- mical, but informative, pamphlet which students and chers will read.

Dr. Matthews asked if it would be possible to make a packet of these pamphlets passed out at the Com- nications Clinic and send them to the Presidents and cretaries of County Medical Societies. He indicated t this would be a good way to disperse some of these as and a covering letter be sent with this packet. Dr. tthews moved that a packet of these pamphlets be t to the Presidents and Secretaries of each county so- ty. Motion was seconded. During discussion, the mat- of cost was brought up. Mr. Swarens pointed out that se pamphlets could be obtained from the AMA and t the only cost involved would be mailing costs. It was n suggested that these be sent only to the secretaries each society.

The motion was amended to read as follows:

> Move that a packet of these pamphlets be sent to the Secretaries each county society.

The motion was seconded and carried.

Mr. Swarens was requested to study the News Media de and report back on it at the December meeting. **Referred to Miscellaneous Affairs Committee.**

COMMITTEE ON PLANNING

Dr. Hetlage stated that Resolution #27, regarding uncil Chairmanship, had come from his District and l been considered by the Planning Committee. It was t that as it now stands, it could not possibly be imple- nted. Dr. Hetlage requested that this resolution be re- red back to the Planning Committee for further con- eration.

Dr. Gunn moved that this item be referred back to the nning Committee for reconsideration and report be- e the Annual Meeting. Motion was seconded and car- l.

The recommendation that the Constitution be changed that the Immediate Past-President of the Association longer be a member of the Council also was referred k to the Planning Committee for further consideration.—**Referred to Reports of Officers Committee.**

■ The next item considered by the Planning Committee was the possibility of obtaining medical students, after their first year of medical school, working as assistants in physicians' offices during the summer. Dr. Franklin stated that this was an excellent program and gives the students a chance to find out what medicine is about.

It was moved to send this recommendation to the Commission on Continuing Education and Health Manpower. Motion was seconded and carried.—**Referred to Medical Education and Public Welfare Committee.**

■ The last item considered by the Committee was the possibility of relinquishing our tax exempt status under IRS regulations for nonprofit corporations. Dr. Cope stated that we ought to have our attorneys and accountants views on this matter.

Dr. Hansbrough moved that this matter be referred to the Long Range Planning Committee for further detailed study. Motion was seconded and carried.—**Referred to Reports of Officers Committee.**

MSMA SPONSORSHIP OF TOURS

■ Mr. Cooper reported that 134 physicians and their wives had signed up for the Caribbean Cruise and that the program had been approved for credit hours by the AAFP.

A committee composed of Drs. Martin, Hetlage and Chandler had been appointed to look at some suggested material for future tours. The committee recommended taking the Rhine Tour.

Dr. Hetlage moved acceptance of the Rhine Tour. Motion was seconded and carried.—**Referred to Medical Education and Public Welfare Committee.**

COMMITTEE ON MEMBERSHIP COMMUNICATIONS

■ Dr. Franklin, Chairman of the Committee, stated that effective membership communications is a problem in all organizations. He indicated that the committee reviewed the methods of communications now used by the MSMA and studied varied types of inner communications employed by other associations. One interesting idea would be the publication of an annual "Blue Book." This would be published in conjunction with our annual roster issue and could contain items of general interest and importance to physicians. The committee recommends considering adding it to the MSMA communications program.

The committee also felt that readership of the Journal might be better if more socio-economic material was added and, also, many *Letters to the Editor* require meaningful answers.

The committee discussed various ways of distributing the *Newsletter* which is the yellow sheet insert in the Journal. It was felt that the *Newsletter* tends to increase readership of the Journal and the committee recommends the expansion of the *Newsletter* to perhaps four pages when available material warrants.

The committee felt that hospital bulletin boards could be of aid in communications if the material is fresh, important and limited to one page. An area of communications the committee deemed vital is the personal contacts of MSMA officers and staff with local medical societies. This offers a chance for local physicians to become better informed on how the MSMA works and what it provides for its members.

The committee also recommends that the new-member pamphlet be revised and updated and mailed to each new member and that staff should investigate other materials that might be of assistance to new members.

The committee recommends the News Media Awards be continued. Finally, the committee recommends that the Editor of the Journal be added to the Membership Communications Committee.

Motion was made, seconded and carried that Dr. Franklin's report be approved and, in so doing, we approve these matters and distribute these to the various committees and commissions for study.—**Referred to Reports of Officers Committee.**

REPORT OF LEGAL COUNSEL

■ Mr. Noble reported that a summary of the Curteman Case had been forwarded to Mr. McIntyre and that copies had been given to the officers and councilors.

Mr. Noble indicated that the Health Care Foundation suit was pending a setting of date for trial in the Circuit Court of St. Louis County. He indicated that recently interrogatories had been filed by the plaintiffs and that we had furnished them with complete answers setting forth the legal steps in the formation of the Foundation. Mr. Noble indicated that he had asked the attorney for the plaintiffs for at least 60 days notice of the date set for trial in order to line up witnesses and so that there would be no conflicts. He also indicated that he planned to meet with the lawyer for the Foundation in the near future for further cooperative endeavors.

JCAH WORKSHOP

Mr. Fox stated that at the last Council Meeting, it was voted to hold the Mini-Estes Conference on March 1-2, 1973 and the JCAH Workshop would convene when the Mini-Estes Conference adjourns. Mr. Fox stated that since that time, the Joint Commission faculty in Chicago has informed us that this workshop should be on its own merits and not rely on the attendance at some other program. The dates for the workshop have been changed to May 11, 12 and 13 at the Lodge of the Four Seasons. This will be jointly sponsored by the Hospital Association. Mr. Fox asked if the Council would like to reconsider sponsorship for this.

The question of financing was brought up and Mr. Fox stated the Joint Commission had to have 150 advance registrations accompanied by checks for registration fees before they would even have the workshop. Mr. Fox stated that he didn't anticipate any financial deficit on the basis he just described.

Dr. Franklin moved that we co-sponsor with the Missouri Hospital Association the hospital workshop of the Joint Commission on Hospital Accreditation. Motion was seconded and carried.—**Referred to Miscellaneous Affairs Committee.**

REPORT OF THE TREASURER

■ Dr. Gulick, MSMA Terasurer, gave a brief report on the financial standing of the Association, copies of which were distributed to the Council and Officers. He stated that the Association is in good financial condition at the Present time. On motion, duly seconded, the report of the Treasurer was approved.

REPORT OF THE BUILDING COMMITTEE

Dr. Matthews, Chairman of the Committee, reported that we had paid $5,000 down on the new building. He stated that the building would be vacated around October 1. Dr. Matthews indicated that with our present financial condition, we would be able to purchase the building outright and use the building as collateral in securing funds for remodeling.

Dr. Matthews stated that the architectural firm
Pallardy and Evans of Jefferson City has been reta
on an hourly basis rather than the standard contrac
a percentage of the construction costs.

The committee also approved the selection of
Schell Construction Company of Jefferson City as
contractor. Both the architect and the contractor l
worked on the adjoining buildings and the comm
felt that this would result in a savings because deta
plans and specifications of the other buildings will
helpful in our plans.

Dr. Franklin moved that the report of the comm
be approved. Motion was seconded and carried.—
ferred to Reports of Officers Committee.

■ Dr. Bradshaw asked for reflective thinking on a
sible solution to some of our medical problems. He i
cated that he would like to have thoughts on the ide
having each physician spend some time as a prin
physician during his training after graduation and be
he continues on in the specialty training he wishe
pursue. This would be an additional period of trai
in his career before he continues in his residency work

Motion was made and seconded to table this ma
until the next meeting. Motion carried.

Dr. Martin stated that the committee reports had
quite long during this meeting and that a time l
should be put on these reports.

Dr. Martin moved that all reports given to the Cou
should be limited to 15 minutes, excluding discuss
Motion was seconded and carried.—**Referred to Med**
Education and Public Welfare Committee.

■ Mr. Swarens indicated that responses had been
ceived in regard to Resolution #35, which called for
mailing of a card asking physicians to restrict their
of amphetamines. Mr. Swarens stated that to date 1,
physicians, which is 40% of the membership, had sig
the cards. He also stated that the resolution also ca
for this information to be released to the news me
Mr. Swarens asked whether or not this informa
should be released now.

Motion was made and seconded to release this in
mation when it reaches 50%. Motion carried.—**Refer**
to Miscellaneous Affairs Committee.

■ The Chairman stated that he, on behalf of all th
present, would like to thank Dr. and Mrs. Stricker for
fine entertainment on Friday and Saturday.

Mr. McIntyre stated that the Budget Committee m
ing would be held on Friday, December 8, and
Council Meeting on Saturday, December 9 and Sunc
December 10. He indicated dates were being held
Ramada Inn, Jefferson City. He said the rates had b
raised at the Lodge of the Four Seasons, where last ye
December meeting had been held. Dr. Chandler mo
that the December Council Meeting be held at the
mada Inn in Jefferson City. Motion was seconded
carried.—**Referred to Reports of Officers Committee.**

Meeting of Dec. 9-10, 1972

■ James C. Cope, M.D., Columbia, Chairman, called
meeting to order. Those present were Drs. Cope; Wa
T. Gunn, St. Louis; E. A. Stricker, St. James; John
Matthews, Jefferson City; Charles R. Gulick, St. Lo
Gerald L. Miller, Kansas City; John N. Martin,
Joseph; Lysle M. Bach, Hannibal; Max S. Franklin,

ouis; Louis P. Hetlage, Troy; William D. Bradshaw,
linton; R. Allen Chandler, Kansas City; Howard J.
cAlhany, Springfield; Claude W. Cooper, Thayer; Eu-
ene T. Hansbrough, Poplar Bluff; Hector W. Benoit,
., Kansas City; Stanley S. Peterson, Springfield; J. Lor-
Washburn, Versailles; Samuel B. Guze, St. Louis;
eorge A. Thoma, St. Louis; William D. Mayer and
illiam C. Allen, Columbia; Allen Klippel, St. Louis;
ul R. Young, Columbia; Melvin Kasten, Cape Girar-
au; Arthur Rikli, John Maher, Helen Yeager, Colum-
a; Mrs. Keith D. Jones, Warrensburg; Mrs. Jackie
atson, St. Louis; Messrs. Lee Mortenson, Chicago, Ill.;
hn Noble, Kennett; Allen D. Smith, Kansas City;
ollister S. Smith, St. Louis; Gary L. Schnedler and
ax Lilley, Springfield; Mark Halvorson, Jefferson City;
y McIntyre, Tom P. Fox, Royal O. Cooper and C. C.
varens, Staff.

Chairman Cope called the meeting to order and re-
ested approval of the minutes of the Sept. 16-17,
72 Council meeting. Dr. Hetlage indicated that due
several objections, he had withdrawn the statement
garding organized medicine which appeared in the
uncilors' copy of the minutes and would discuss this
rther during his Councilor District report. On motion,
ly seconded, the Council minutes as published in the
urnal were accepted.

REPORT OF THE EXECUTIVE SECRETARY

Mr. McIntyre reported that Dr. Bach had represented
e Missouri State Medical Association at the services
Dr. W. F. Francka, Hannibal, a Past-President of
SMA, who passed away recently. The Association sent
wers.

A note of thanks has been received from Mrs. Shat-
n, widow of Dr. Martyn Shattyn, thanking the As-
ciation for the "In Memoriam Perpetuum." This trib-
e, signed by the MSMA President and the Executive
cretary, is sent to the families of deceased members.

Mr. McIntyre read a short note from Dr. George
ett expressing his appreciation for the letter the As-
ciation sent when he resigned as Director of the
vision of Mental Diseases. Dr. Harold Robb has been
pointed as the new Director.—**Referred to Reports of**
ficers Committee.

A letter was written to the AMA to find out why the
IA did not appear before the Kennedy Subcommittee
Health regarding HMO legislation on June 22, 1972.
e reply pointed out that the AMA had reported to
committee on various other occasions.—**Referred to**
solutions Committee.

The Councilor from District #6, Dr. Bradshaw, has
en elected Vice-President of the State Board of
alth.

A letter to John R. Smart, Ph.D., Central Methodist
llege, from Dr. Charles A. Worley, Chairman, MSMA
Hoc Committee on Health Manpower, regarding a
ommunity-Based Educational Manpower Project in
ral Mid-Missouri" was read. This letter indicated that
Committee had given unanimous approval in prin-
le to the proposed project and further stated that the
ion of the committee was subject to official confirma-
n of the Council.

Motion was made to accept this Committee report.
tion was seconded and carried with one dissenting
te.

Mr. McIntyre stated that a news release was written
garding the stand the Council had taken on acupuncture at its September meeting. Prior to release, the Board of Healing Arts had taken action on this matter. Unfortunately, this was not known to the Association. Many times, press releases are misinterpreted, and the MSMA office has received many inquiries seeking physicians who will perform acupuncture.—**Referred to Medical Education and Public Welfare Committee.**

■ In September the Missouri Ear, Nose and Throat Association, Inc., a statewide organization, was formed. The Association has asked the MSMA to recognize this organization on the Interspecialty Commission for otolaryngology. On motion of Dr. McAlhany, duly seconded, it was agreed that the Council accept the request of this group and that the organization becomes a member of the Interspecialty Commission.—**Referred to Miscellaneous Affairs Committee.**

■ Dr. Allen gave a short report on the meeting of the National Joint Practice Commission which he attended on November 9-10 in Atasca, Ill. at Dr. Worley's request.

Dr. Allen said he was pleased to represent the MSMA at the meeting. He stated that the impetus for establishment of the National Joint Practice Commission came from the National Commission for the Study of Nursing and Nursing Education for the purpose of promoting involvement of physicians and nurses in a cooperative effort to develop further the role of medicine and nursing to effect better health care. Both the president of the American Nurses Association and the president of the American Medical Association addressed the group. AMA President Hoffman pointed out that while the AMA supported the National Joint Practice Commission, he felt that the states were the laboratories for exploring and testing the expanded roles for nurses, as well as new mechanisms and roles of physicians and nurses working together in the private practice setting. A list of objectives were distributed to the participants. To date, 26 states have established Joint Practice Committees and others have Liaison Committees or some other form of formal liaison between physician and nurse organizations. Only two states have no structure for formal relationship between the two organizations. There were small group sessions for the major portion of the Conference with an opportunity for all attendees to participate.

Dr. Allen called attention to a booklet entitled, "The Physician's Assistant—Today and Tomorrow." He felt that it is well worth reading. The price of the book is $3.95 and can be obtained from the County Mailing Service, Inc., Sawmill Road, Westhaven, Conn. 06516. On motion, duly seconded, the report given by Dr. Allen was accepted.—**Referred to Medical Education and Public Welfare Committee.**

■ Mr. McIntyre stated that a letter had been received from the AMA regarding its National Leadership Conference to be held on Feb. 16-18, 1973. Discussion followed regarding which MSMA officers should attend this conference. On motion, duly seconded, it was agreed by the Council that the President-Elect, Chairman of the Council, Vice-Chairman of the Council and Executive Secretary should attend this National Leadership Conference.—**Referred to Reports of Officers Committee.**

REPORT OF LEGAL COUNSEL

■ Mr. Noble reported that the Health Care Foundation of Missouri case is set for trial on January 15, 1973. He indicated that he and Mr. Carson, Legal Counsel for the Health Care Foundation, are working on the details for the trial and will be in touch with those members of the Council whose presence they consider necessary at the trial.—**Referred to Resolutions Committee.**

■ Chairman Cope introduced and welcomed Dr. Melvin Kasten, Cape Girardeau, President of the State Board of Registration for the Healing Arts.

The Chairman added an item to the agenda regarding a Building Committee Report for Sunday.

REPORT OF THE TREASURER

Dr. Gulick presented the Treasurer's Report. He reviewed the figures shown in the Treasurer's Account, minus the accounts payable, which left a balance on hand of $40,214.89 as of Dec. 1, 1972. This does not include the investment account (at cost) of $125,733.91.

On motion of Dr. Gunn, duly seconded, the Treasurer's Report was approved.

REPORT OF THE BUDGET COMMITTEE

The Budget Committee met on Friday afternoon, December 8, prior to the Council meeting on Saturday. The Committee reviewed the material presented which showed Exhibit A—Actual Income through October 31, 1972; Expected Total Income for 1972; Income Budget for 1972 and Estimated Receipts for 1973. Exhibit B—Actual Expenditures through October 31; Estimated Expenditures for 1972; Budget for 1972 and Proposed Budget for 1973. Exhibit C—Actual Meeting and Committee Expenses through Oct. 31, 1972; Estimated Expenses for all of 1972 and Proposed Budget for 1973. A breakdown of anticipated income and expenses for the year 1972 was also included.

Dr. Gulick indicated that he felt the proposed budget for 1973 is practical and within anticipated income. He further stated that the Budget Committee recommends that for 1973, the interest from the Investment Fund be placed into the operating fund rather than being reinvested.

Dr. Gulick indicated that the building for the Missouri State Medical Association headquarters office has been paid for. However, this money did not come out of current income. The Budget Committee commended the AMA Delegates for the great job they have done and wanted them to know that their efforts are appreciated.

Dr. Gulick stated that at the April, 1972 Council Meeting, the Council recommended that the MSMA give $100 to each of the four SAMA (Student American Medical Association) organizations in the state in addition to the $100 donation to the National SAMA. This has been budgeted and will be done this next year. The following proposed budget was approved for 1973:

Salaries	$125,520.00
Furniture & Fixtures	500.00
Office Rent & Lights (Four months present office)	2,560.00
General Expense	3,900.00
Office Supplies	4,800.00
MSMF Assessment	39,340.00
Journal Expense	48,500.00
Postage	4,700.00
Equipment Rentals & Repairs	2,300.00
Telephone & Telegraph	8,000.00
Pension Expense	21,000.00
Legal & Professional	9,500.00
Payroll Taxes	5,502.
Commission-Committee Meetings	38,100.
Annual Session	18,500.
Car Lease and Expense	2,300.
Taxes—IRS	500.
Travel Expenses	5,500.
New Building Expense (Operating)	12,735.
Total	$353,757.

On motion of Dr. McAlhany, duly seconded, the ı port of the Budget Committee was accepted.—**Referr to Reports of Officers Committee.**

REPORT OF THE PRESIDENT

■ The Council's attention was called to the December issue of the *AMA Newsletter* which states that a pı gram entitled "What Price Health?" will be aired NBC-TV on December 19 at 9:00 CST.

Governor-Elect Bond has been invited to be the ba quet speaker at our 115th Annual Session of MSM Mr. Bond is not accepting engagements this far in a vance and should receive a repeat invitation 60 days advance of the speaking engagement. Dr. Sammons, member of the AMA Board of Trustees, will be on tl program of the Annual Session.

A recent opportunity to sit in on the giving examinations by the Board of Registration for the Hea ing Arts was offered to Dr. Gunn. He felt that tl examinations were well conducted.

The Texas Academy of Family Physicians has a pr gram called "Doctor for a Day." This program, in e sence, calls for a physician to be in the Capitol durii the time when the General Assembly is in session. D Koon, President of the Missouri Academy of Fami Physicians, will try to start such a program for Missou

The MSMA has received a letter from a special cor mittee of the University of Missouri-Columbia reques ing the names of any physician or physicians recor mended to fill the newly-created position of Provc for Health Affairs. Dr. Allen explained that the Boaı of Curators had approved creation of this new positic and the Chancellor had appointed a committee that in the process of describing the role of the provost ar the type of individual needed to fill this position. The charge is to present to the Chancellor and, subsequentl to the Board of Curators at least four candidates fro whom one will be selected. Dr. Cope then appointe Dr. Bradshaw, Chairman; Drs. Chandler and Gulick a committee to suggest a physician for the position Provost. The Committee was asked to report on Sund morning.—**Referred to Medical Education and Publ Welfare Committee.**

■ The AMA has requested appointments to the con mittee working with the Federal Food and Dru Administration which is investigating drugs sold acros the-counter. Suggestions for these appointments we Drs. James O. Lottes, St. Louis; Richard P. Bowle Liberty; and Albert D. Cross, Trenton.

Dr. Gunn reported that he had received a lett commending Mr. Tom Fox and thanking him for settir up the MECO program for next year.

COUNCILOR DISTRICT REPORTS

District #4—Dr. Hetlage reported that he had hel his usual Councilor District Conference. However, it wa not attended by a majority or quorum of the delegate there were no specific recommendations, but sug- ested reconsideration of some of those made previously.

Dr. Hetlage said that the Lincoln County Hospital taff, which represents part of the members of one of r. Hetlage's societies, had recommendations to make. ne regarded automobile accidents. It is felt that the ork being done by Dr. Klippel and his group per- aps does not include specifically those factors which pply to rural accidents. "We have recommendations to ake that I feel are pertinent. Factors involved in the rder of their frequency are highway engineering with pecific regard to highway maintenance, highway mark- ngs, consistency of markings and consistency of light- ng. Second, age of the drivers and their physical condi- on. We would suggest that the recommendation be ade to the proper Commission to require compulsory xamination, both physical and for competency, for those ndividuals over the age of 65. The third factor in im- ortance is relative to drinking. We feel that permission draw blood should be given and this should be in- luded as a part of the signature on the drivers license." e further stated that they feel more time should be pent by the Highway Patrol in spot checking drunk rivers and less time on speeders. He further said that great factor in his area is drivers who are fatigued nd he indicated that they, too, might be spot checked y patrolmen. Dr. Hetlage asked that he be allowed take these recommendations to the appropriate com- ission. No objections were raised.

The Council's attention was called to the entire situa- on relative to nursing home care. He stated that more tention should be given to appraisal and that he ould talk with Dr. Bradshaw about this.

Dr. Hetlage reported that a significant meeting was eld between the St. Charles County physicians and e local druggists. Matters of labeling and refill in- ructions were discussed. The druggists were not ware of the fact that the state has taken a stand on beling of prescriptions. He pointed out that there is a rious problem on Sunday and holiday coverage in harmacies. Dr. Hetlage said that he wanted to bring is to the Council's attention and recommended that is same meeting be conducted in other areas. Of 50 harmacists invited to the meeting, 35 were in attend- nce.—**Referred to Miscellaneous Affairs Committee.**

Dr. Hetlage then brought up the subject of the state- ent which he voluntarily withdrew at the previous ouncil meeting regarding organized medicine and pos- ble restructuring and changes. He said that it was a atement which was prepared carefully following the commendation of the Councilor District Conference hich consisted of a quorum of the delegates and of- cers of the Fourth District. He stated that he withdrew and had each medical society approve it word for ord. The remarks in that statement were not neces- rily his, but the Councilor District's and they have ap- roved it and asked that he present it and read it again to the minutes of this meeting. He indicated that there no particular reference to any particular individual. r. Hetlage then read the following statement;

"It is not the District Councilor nor the Fourth Dis- ict delegates, but a widespread opinion, that the struc- re of organized medicine needs changes which would t the profession into line with the social and eco- mic, as well as governmental, pressures of the day. hysicians, particularly young physicians, at the grass ots level are speaking out on communications, par- cipation, relevance and involvement within their profession. Many of these men feel that the structure of organized medicine fails to meet their needs for representation and involvement and either have become apathetic or have pressed their desire for change. There are those who feel that the hierarchy of medicine has ignored these cries and has resisted change until the degree of participation showed an alarming tendency to drop and that only now has the atmosphere become one receptive to change, change which should have been an ongoing process of an organization sensitive to the desires of those members who constitute the foundation of its being.

"As long as men are content to function within a set structure, there will be other men willing to place themselves in a position of jeopardy, to rouse those men into some kind of activity, be it positive or negative.

"Considerable thought has gone into recommendations to the delegates to the AMA from this district. No one has an answer. No one is willing to say that total revolution is an answer, but we do say that a careful examination of the structure is in order and that careful and relevant changes can and should be made.

"We feel that the AMA is not an entity unto itself. No. The AMA is state societies, composed of delegates, councilors, societies and grass roots members. We feel that change in the AMA should rightly begin at the county society level and extend through the state structure to ultimately be reflected on the posture and operation of the AMA.

"Of primary consideration, then, is the county medical society. Is it a relevant and effective political and educational unit? Would not the hospital staff, with its compulsory attendance and day to day liaison, be a more effective political unit?

"Care should be given to the position of delegate to the state convention. Is this job a meaningful one with opportunity for significant pertinent input, one to be sought after, or is it now a position to be filled by those who have nothing better to do than rubber stamp mostly meaningless resolutions? Is the quality of the delegate lower now than it would be if the job were a continuing one throughout the year, one to be sought after because of its responsibility and sensitivity?

"Are councilors seeking the job because they wish to have significant input and because they want to be representative of their districts? Should the job of councilor be a permanent position supported ad infinitum by the district who wants a president, or should his term be limited, so that fresh, new ideas would be forthcoming from younger men?

"Should the president always come from the Council or should the delegates have some voice in the selection from an open panel?

"Should the AMA Delegates be selected without limitation of tenure by a nominating committee with set instructions and elected without question by voice vote of a powerless house of delegates or should the AMA delegates be elected from an open slate proposed by an unrestricted nominating committee of responsible delegates?

"In other words, gentlemen, how is the grass roots member going to be properly represented to the AMA if he is not represented by a strong delegate organization, who actively seeks and pursues the job, who participates in district activities on an ongoing basis, and who have an active say in who will represent him as an officer of the state society and as a delegate to the AMA?

"The effect of a change to relevance on the part of the state conventions should have a noticeable effect upon the makeup of the AMA.

"Above that, we feel that younger but responsible men, both on a state and AMA level, should be used on commissions, committees and as alternate or sub-alternate representatives, recognizing the limitation of numbers within the delegate structure.

"We submit that the lines of communication from the top down should be further reinforced, that ongoing work at the AMA level be frequently reported by some appropriate means and that councilor district delegate meetings be kept informed as to those decisions which may be of relevance to the concerned physicians. In other words, the house of delegates has a reverse function, a reverse flow through the AMA delegates to the councilor district organization back to the local society.

"We submit that constructive thinking along these lines could lead to changes which would satisfy the thirst for representation among the members at the bottom."

Dr. Cope indicated that the above statement was sent to our AMA Delegates and Alternates prior to the Cincinnati meeting.

Lengthy discussion followed regarding the statement from the Fourth Councilor District. Communications is still the obvious problem and there was a suggestion made that the Councilors might ask for five minutes at hospital staff meetings to disseminate information. It was pointed out that where the information does not get back through publications, the Councilors should see that it does get to their areas. Should the Councilors have a budget for these purposes? It was indicated that one county invited hospital representation on its county society council. However, this effort failed as these hospital representatives did not attend the Council meetings.

Dr. Hetlage stated that he feels we need to stimulate the young physicians' desire to become involved in organized medicine. Many of them think the hierarchy of medicine doesn't really care about the relatively new physician. He stated that the key man program is certainly a valid one in hospitals. Many physicians feel that they are not represented in organized medicine. We need to make the job of state delegate an important one and not for just a couple of days a year.

Dr. Cope stated that he appreciated this report from the Fourth District, if only for its stimulating quality.

It was stated that not all physicians, young or old, want to become involved in organized medicine; many are just not interested and they have other interests.

It was brought out that many times young physicians who are just getting started in practice do not have the time to become involved in extra curricular activities. It takes several years to become interested. We need innovations, but perhaps the present system is not all bad.

Mr. Mortenson said that one AMA staff has four speaking engagements at various Missouri component society meetings within the next month. This is one means of communication. He indicated that Illinois has implemented the key man system. They also have instituted a bulletin on the most recent state and AMA innovations to be placed in every hospital every two to three weeks. Mr. Mortenson indicated that everyone wants to be heard and wants to know that someone is listening to them specifically. He further stated that he could bring to the Council material on other state communications systems. It was pointed out that, indeed if all of these communications are to be expedited, it going to cost money.

Dr. Gunn stated that if we implement this key ma concept in the 200 hospitals, he would suggest that th green sheet be reproduced. It is the greatest mean the AMA has to reach its people with facts, figure and timely items.

Dr. Hetlage stated that the report is more stimulatin than constructive. He said that in the last session, h District submitted a resolution regarding the medic profession speaking out on public issues and also submitted the one regarding Council Chairmanship. H said that in the report itself there are several thing that are constructive: first make the delegate's job more important one—one to be sought after; secondly limit the terms of Councilors. He stated that the fou main words in the entire report are "communication participation, relevance and involvement."

Dr. Cope suggested that Dr. Hetlage might brea this report down into separate resolutions which coul be referred to the proper commission or committee f study and recommendations.

District #10—Dr. Hansbrough indicated that we ma have gotten away from the original purpose of the bo and check mark on the front of the Journal to ca members' attention to a very important item. On motio of Dr. Hansbrough, duly seconded, the Council requests the Publication Committee to review the purpos of the check mark on the front of the Journal.—**Referre to Reports of Officers Committee.**

■ Dr. Hansbrough reported that on November 19, h Council District meeting was held in Farmington with very interesting program. Our MSMA President and th President of the Woman's Auxiliary were present. A the request of the physicians in the District, we trie to bring up socio-economic problems; physicians foundations, that is, special care foundations; HMOs; CHP and a most stimulating and provocative talk by a youn psychologist who stated that mental illness is too important to have a physician deal with it. Apparently, thi is the way some clinical psychologists feel. His genera concept on how to treat people was very interesting.

Dr. Hansbrough stated that he enjoyed being i Springfield during Dr. Hoffman's visit there.

He said that one thing they found out in his immediate area is how the new controlled drug act i affecting the community. He stated they are having difficult time with falsified prescriptions.

At this point, Dr. Cope indicated that the wive were invited to an informal talk on transactional analysi in the Chairman's suite on Sunday morning at 9:30 AM

District #9—Dr. Cooper reported that they hav postponed their Councilor District meeting until afte the first of the year. He said he had had the pleasur of going on the Caribbean Cruise sponsored by th MSMA and asked to go on record as saying that th MSMA Staff did an outstanding job and the program was well organized. He recommended that the MSM continue to sponsor such tours.

District #7—Dr. Chandler reported that Jackso County will hold its President's Dinner on Friday, January 19 and invited all those present to attend.

Dr. Chandler stated that in reference to the program to be aired by NBC on "What Price Health?," th Executive Secretary of Jackson County has been in contact with the station that carries the NBC network t determine whether or not the officers of the Society ca all a preview of this program. If this is possible, further quiry will be made as to whether we can give a back-p program to answer this. He suggested that other cieties might attempt this and indicated that physiians cannot always sit back and be attacked.—**Referred Medical Education and Public Welfare Committee.**

■ Dr. Chandler said that there is an increasing interest autonomous blood transfusions in Kansas City. A ommittee on Blood has been expanded and Dr. Chanler indicated that he would like to report back to the ouncil on this subject so that perhaps, it can be placed one of the committees on the state level.

Dr. Chandler stated that they are having difficulties ith the Mid-American CHP Agency, particularly as hysician representation on the board is concerned. leretofore, they have had input from the Jackson ounty Medical Society. This has been changed, but ey do not know how or why. There is no M.D. input om the County Society at the present time. The phy-ician now on the board comes back and tries to give logical explanation of their activities, but he is over-helmed by so much paperwork. It is difficult to know xactly what is going on.

He said that the Western Missouri Health Education enter, which was reported by Dr. Noback at the last ouncil Meeting as receiving funding, is gaining mo-entum. This will be an increasingly important area in e future.

He had spoken previously about the HMO which is be in Kansas City. The man who contacted Jackson County Medical Society regarding the HMO is now in full residence. He has contacted the unions, large industries, etc. and is getting some interested audiences, so we feel that there will be, in fact, an HMO of some type in Kansas City in the near future.—**Referred to Resolutions Committee.**

■ *District #8*—Dr. McAlhany reported that Dr. Hoffman, President of AMA, was given an honorary degree from Drury College during his visit in Springfield in November. Dr. McAlhany thanked the officers and councilors who were able to spend time with Dr. Hoffman. He stated that he was very impressed with him.

Greene County did elect a physician as coroner as was anticipated and plans are underway to establish a medical examiner system in Greene County. Clay County has agreed with this concept and a bill will be introduced in the Missouri Legislature. Senators Paul Bradshaw and William Waters are co-sponsoring this bill.

Dr. McAlhany said that there has been advertising by chiropractors in the local newspaper. He was advised first to go through the State Chiropractic Board to see if this group would take action to stop this advertising and then, if necessary, to approach the local Prosecuting Attorney. It was suggested that as the Eighth District Councilor, Dr. McAlhany write a letter to the Chiropractic Board filing a complaint and send a copy of the letter with a copy of the article to the MSMA office and to the local Prosecuting Attorney. A Councilor, a physician or an individual could file a com-

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plaint with the Chiropractic Board. Dr. McAlhany will pursue this matter and will report further to the Council.

Dr. McAlhany called on Mr. Schnedler who commented on the Doctor-for-a-Day Program. This project is being undertaken by the Missouri Academy of Family Physicians. The Academy would provide a physician each day the Legislature is in session. It is hoped this will aid in communications between the medical profession and the Legislature.—**Referred to Miscellaneous Affairs Committee.**

■ He also stated that they had won the case with IRS regarding the Greene County Medical Society Foundation. However, the judgment was appealed. It is still in litigation and the Foundation's attorneys have now filed the report and their answer to the appeal. Hopefully, some decision will be made in the near future.

The Greene County Medical Society Business Bureau has now been incorporated and the Board of Directors has been appointed. The Bureau hopes to be in business by Jan. 1, 1973.

After about six months of research, Greene County Medical Society has produced a reference handbook for physicians. A copy was sent to all physicians in Greene County.

District #3—Dr. Franklin stated that he also attended the meeting in Greene County during Dr. Hoffman's visit. He said that functions were well attended, the food was delicious and "Greene County is really on the ball."

At the invitation of Dr. Hetlage, he attended the meeting of the Fourth District. There were other meetings that night, so it was not as well attended as it might have been. At that meeting, he made a suggestion to Dr. Hetlage and the group similar to Dr. Cope's suggestion, that their suggestions be put into the form of resolutions and presented to the House of Delegates.

The installation of Dr. Donald Judd as President of the St. Louis Medical Society will be held on Saturday, January 13 and all are invited. Dr. Richard Bradley is President-Elect, Dr. Joseph Vacca is Vice-President and Dr. Carol Williams is Secretary.

Dr. Franklin indicated that the yellow pages of the phone book in St. Louis are beginning to list doctors under specialties. He asked for comments about this.

Mr. Allen Smith reported that Jackson County started this specialty listing under the AMA trademark years ago. About 12 years ago, the plan was expanded to include three other medical societies in the Kansas City area—Wyandotte, Johnson and Clay Counties.

Dr. Franklin indicated he did not feel this helped the patients, who have always been able to call the St. Louis Medical Society and this has worked very well.

District #2—Dr. Bach—No report.—**Referred to Reports of Officers Committee.**

■ *District #1*—Dr. Martin reported that Sister's Hospital in St. Joseph had recently announced that it will close. He indicated that this would mean a loss of 200 beds. Dr. Martin also indicated that Sister's Hospital recently had taken over the ambulance service for St. Joseph. He stated that another hospital in St. Joseph had recently hired a physician for its emergency room.

Dr. Martin indicated that it has been difficult to get new doctors in his area. He stated that he was questioned by some city councilmen as to why they don't get new doctors.

Dr. Martin said that they had coroners in his ar who are M.D.'s and that he is willing to help tho in other areas if they wish to get M.D. Coroners.

District #6—Dr. Bradshaw indicated that in the al sence of Dr. Domke, he would report on the Division Health. One recent concern was whether or not smal pox vaccination should be continued. The U. S. Publ Health Service has gone on record as favoring the di continuance of required vaccination. The Division Health had appointed a committee to study this ar that committee reported that smallpox vaccination nee not be continued. Dr. Bradshaw stated that the Boar of Health thinks that it should be continued, but h indicated that the Board would abide by the commi tee's statement. He also indicated that we were goin to be faced with the A-2 English strain of influenza.

Dr. Bradshaw referred to a point mentioned by D Hetlage regarding labeling of prescriptions. In his are the prescription blanks were printed so that a physicia could indicate whether a prescription should be labele

Dr. Bradshaw had the privilege of attending the Fa Conference of the MSMA Woman's Auxiliary in Columbia. The two topics presented were legislative an health education. The program was well done and h felt that Mrs. Jones is to be congratulated.—**Referred t Miscellaneous Affairs Committee.**

■ Dr. Bradshaw requested that an ad hoc committee not only Council members but, also, of those attendin the Council meetings be appointed to study the feasibi ity of inserting a year of continuing training, either afte internship or in lieu of internship, in primary patien care in the state of Missouri. This is being studied i several other states.

Dr. Gunn asked whether or not this would includ emergency room service. Dr. Bradshaw indicated tha he wasn't sure at this point about emergency roo service and would rather not go into detail at this tim

It was moved that an ad hoc committee of the Cour cil plus those normally attending the Council meeting be appointed to study the feasibility of inserting a yea of continuing training in primary patient care in th state of Missouri. The motion was seconded and carrie Dr. Cope stated that the committee would be appointe on Sunday morning.—**Referred to Medical Educatio and Public Welfare Committee.**

■ Dr. Bradshaw reported that the PTA, in conjunctio with the Missouri Department of Education, is plannin workshops over the state. The basic premise of thes workshops is the study of communicable diseases wit emphasis on venereal disease, but the program is no geared entirely to VD control, but also to the development of curriculum from kindergarten through hig school and college for health education and commun cable diseases.

District #5—Dr. Cope stated that his Councilor District meeting was held in conjunction with the Fall Conference of the Woman's Auxiliary in Columbia and tha it had been very successful.—**Referred to Miscellaneou Affairs Committee.**

REPORTS OF AMA DELEGATES

■ Dr. Washburn stated that in the absence of Dr. Neilson, he would give the AMA Delegates' report. Th 1972 Clinical session of the AMA was held in Cincinnati on Nov. 26-29, 1972. Approximately 50 report and 70 resolutions were considered. A hearing of th ouncil on Long Range Planning and Development was eld on November 27 and the Council on Medical ervice held a conference on Saturday afternoon, Noember 25, on the subject of PSRO's (Professional Stanards Review Organizations). This problem dominated he meeting. President Nixon, by signing HR 1, made weeping changes in Social Security, Medicare and edicaid. The price tag is $6 billion and tax increases re to be imposed. The bill (1) extends Medicare to ome people under 65 and brings the disabled into the rogram; (2) it federalizes aid to the aged, blind and isabled with a guaranteed income program; (3) it inreases several Social Security benefits, such as raising idows benefits, and it lifts the amount retirees can arn and retain benefits. Nearly 100 changes are made in edicare, Medicaid and Maternal and Child Health reas of the law and authorizes payment under Medicare o prepaid group practices termed HMO's.

However, the most significant change in the law for racticing physicians in our nation is the creation of a ationwide system of Professional Standards Review Oranizations to police the cost and quality of health are for Medicare and Medicaid. However, extending his principle to the entire population a section at a ime is entirely possible. The principle of government ontrol of the practice of medicine through imposition f government-developed standards of diagnosis and reatment has already been established by the enactment f this legislation to create a network of PSRO oranizations. It seems that justification for coercing .D.'s into conforming to federal standards in their ractices is that the government has "the right" to conrol anything it subsidizes.

The AMA Board of Trustees apparently is trying to ell HEW officials on the idea of letting physicians lead he way in the development of guidelines and criteria to e used in PSRO activities.—Referred to Resolutions ommittee.

■ Dr. Washburn reported that the AMA Council and ommittee structure has been drastically altered to save 840,000. Report A, presented by the Board of Trustes, is a sweeping change. It is labeled, "Fiscal Retraint and Priorities." It abolishes four councils and six ommittees, combines two other councils, reduces memership on the remaining councils and committees, cuts own on frequency of their meetings and trims 15 emloyees from the headquarters staff.

An AMA Conference on 1973 Membership Program as held on November 27. Membership in the AMA as f October, 1972, stands at 155,074—about 1,000 less han the 1971 total. It is expected that membership will robably equal the 1971 figure by the end of this year. embership is still far below the 165,000 figure of 1970. wenty-one states have equalled or bettered their 1971 embership totals. Missouri has reached 98% of its 1971 otal. The AMA is issuing "guidelines for a 1973 Memership Drive," which, hopefully, will help component ocieties bolster local and state society and AMA memership.

The AMA delegates discussed various resolutions and eports presented at the 1972 Clinical Session, which nclude the following: A resolution encouraging unified embership; Resolution #33 which calls for liaison etween state medical associations and federal repreentatives and agencies; Resolution #1 which calls for hysician representation on governing boards of hospitals; esolution #23 which calls for the development of improved communications between medical staffs and state and local medical societies; Report F of the Board of Trustees regarding the responsibility for actions of the physician's assistant; Report H of the Board of Trustees regarding recommended definition of the role of a primary care physician; Report B of the Council on Medical Service regarding public involvement in health services review; Resolution #24—Review Committees for Medical Practices; Report J of the Council on Medical Service regarding the claims practices of Aetna Life and Casualty Company.—Referred to Reports of Officers Committee.

■ Dr. Benoit stated that he had been asked to discuss the PSRO legislation recently adopted by Congress. Dr. Benoit indicated that a Conference was held during the AMA Clinical Session to discuss PSRO. He indicated that the AMA is going to appoint an advisory committee on PSRO to act as the medical profession's advocate to insure the proper implementation of this program in order to assure the best interests of the public and the profession. This committee will include members from the Board of Trustees, the Council on Medical Service and representatives from other appropriate organizations. The Committee was given several responsibilities which include some of the following:

(1) Provide input from the medical profession into the development of the rules and regulations which will govern the Professional Standards Review Organizations program; (2) Assist state medical associations, or state medical associations in concert with county medical societies, in developing PSRO's and to recommend structures and operating mechanisms; (3) Recognize appropriate geographical boundaries for PSRO's; (4) Distribute information about Public Law 92-603. Dr. Benoit stated that this information needs to be circularized to every member of our Association. He indicated that doctors need to know what is in the law. This Committee and other AMA councils and committees will monitor the effect of PSRO activity on the quality of medical care and report their findings to each future meeting of the House of Delegates.

Dr. Benoit stated that we in Missouri have recognized that we were going down the road toward legislation of this type and that is why we started the Health Care Foundation. He indicated that the HCF is structured along lines that, hopefully, would make it the PSRO for Missouri and, thereby, maintain as much control as possible over our own destiny and over the destiny of the care of patients. Dr. Benoit indicated that the law states there will be no liability to persons serving in a peer review capacity for actions they take unless there is proven malice.

Dr. Benoit then asked if there were any questions. Dr. Bradshaw asked if there would be lay input into the PSRO. Dr. Benoit indicated that as far as judgment of the competency of professional care is concerned, there is no one who can do this appropriately except physicians; but when you are talking about review of health care services, there is other expertise that can be brought to bear on this problem. He indicated that some of these people will be hospital administrators, legislators, legal and business people. Dr. Benoit indicated that the funding of this program has been written into the law. He stated that this legislation should be summarized and published in the Journal.

It was moved that staff publish a summarization of PSRO legislation in a future issue of MISSOURI MEDICINE. The motion was seconded and carried.

Dr. Washburn thanked the Alternate Delegates, Dr. and Mrs. Gunn, Dr. and Mrs. Stricker, Dr. and Mrs. Cope and staff for their assistance at the AMA meeting.

HEALTH CARE FOUNDATION REPORT

Dr. Benoit stated that a Board meeting had been held the evening before the Council Meeting. He indicated that the Foundation is proceeding with efforts to obtain financial support from RMP. Dr. Benoit reported that the Foundation had solicited the participating members for support and that they had a reasonably good response. To date, they have received $12,110 from the participating members. He indicated that the Missouri Radiological Society had been extremely active and interested in the Foundation. The Society had held a meeting in Kansas City regarding its role as it relates to peer review and had sent a check to the Foundation.

Dr. Benoit reported that he had recently met with the medical directors of several large companies in Kansas City and the Foundation has agreed to assist them with their problems. One of the companies made a financial contribution to the Foundation recently and Dr. Benoit stated that he feels that the Foundation will obtain similar contributions from the other companies.

Dr. Benoit stated that he would like to commend Mark Halvorson for the fine job he is doing.

Dr. Benoit indicated that the Council had appointed a committee to act as consultants to the Bylaws Committee of the Foundation. However, since the passage of the PSRO legislation, the committee had regrouped. He stated that the Board had spent time discussing how to approach bylaw changes in order to accommodate the Foundation to HR 1. He indicated that one of the main changes would be the manner in which men are elected or appointed to committees. He stated that it was important that these changes be made as soon as possible so that the Foundation might be considered by HEW as the PSRO for Missouri.

Dr. Benoit stated that they had 60% participation from the members of the Association, but would like to have 80%. He indicated that further solicitations will be made.

AD HOC COMMITTEE ON THIRD PARTY PAYMENTS

Dr. Peterson reported that the Committee had met with representatives of carriers and had discussed mutual problems with them. Dr. Peterson mentioned a letter that Aetna is sending to patients and said that at the January meeting of the Commission on Medical Economics, Aetna officials will be present to discuss this and other claims policies.

The Committee presented the following recommendations for consideration by the Council:

1. That standard HIC forms be used to file insurance claims and that this form will have provision for designating any disability and if the carrier requires special forms to be filed, the physician should charge the carrier $5.00 for the preparation of each required form and further that all carriers be so advised.
2. That representatives of carriers present request the Health Insurance Council, in cooperation with the AMA Council on Medical Service, to design simplified, one-sided forms that will enable physicians to retain a copy for their files. This form should also provide a blank for the stamp of the physician's name and ID number.
3. That all carriers adopt the AMA-CPT Third Edition Code.

Dr. Miller moved that this report be accepted and that the recommended actions in the report be taken Motion was seconded and carried.

AD HOC COMMITTEE ON NEGOTIATION OF PROFESSIONAL FEES

Dr. Peterson distributed copies of proposed bylaw for a negotiation of professional fees organization tha the committee is presently trying to organize.

Motion was made and seconded that action on these proposed bylaws be tabled. Motion carried.

Dr. Peterson introduced Mr. Max Lilley, an attorney from Springfield, who had drawn up the proposed bylaws.—**Referred to Resolutions Committee.**

REPORT OF THE COMMITTEE ON EMERGENCY MEDICAL CARE

■ Dr. Klippel stated that a Task Force on emergency Medical Care under CHP had been appointed by Governor Hearnes. The Task Force spent a great deal of time going over this problem and has developed an emergency care services plan for Missouri. He indicated that the Governor's Advisory Council on CHP had approved this program. He stated that every hospital and physician has a role to play in emergency medical care. He indicated that the Governor's Advisory Council on CHP will try to generate support for legislation to implement this program.

Dr. Klippel then spoke briefly about the high cost of using helicopters as ambulances. He asked the Council to pass a resolution endorsing the idea of the development of a program for emergency care in the state.

Dr. McAlhany indicated that he would like to have material to read and study before taking any action on this. Dr. Klippel stated that he was not asking for the endorsement of a specific program, but only of the idea of establishing such a program. It was brought out that a bill had been introduced in the legislature last session regarding ambulances and ambulance personnel, but was not passed. Dr. McAlhany asked what would happen to the small community who could not meet the requirements of this program. Dr. Klippel stated that the idea is to have something down on paper and have money available to implement the program so that the small community that desires these services can avail itself of them.

Dr. Hetlage moved that the Council of the MSMA approve in principle the efforts of the Committee on Emergency Medical Service and encourage further development of a coordinated program for these services in Missouri and, also, provide for the regionalization of ambulances. Motion was seconded and carried.—**Referred to Miscellaneous Affairs Committee.**

REPORT OF THE WOMAN'S AUXILIARY

■ Mrs. Jones thanked the Council and the committee of the Council that helped the Auxiliary with its Fall Conference. She reported that there were 30 state representatives present and the total attendance was between 150 and 200. She stated that the Missouri Auxiliary is the first to have a Health Education Day and that this Auxiliary Health Education Day will be used as a pilot program for the other 49 state auxiliaries.

Mrs. Jones stated that Dr. Richard Bowles had asked the Auxiliary to support the Public Affairs Conference.

he indicated that the Auxiliary will support it by at-ending the Conference and, also, that it would hold a iid-winter Board meeting preceding the Conference. he reported that the Woman's Auxiliary has 91 IMPAC members and that she hoped to have 100 by ie end of the year.

Mrs. Jones reported that this year, the Auxiliary has iised $1,000 for the Missouri State Medical Founda-on. She said that the county auxiliary with the largest er capita contribution to the Foundation will receive plaque with that county auxiliary's name inscribed pon it.

Mrs. Jones stated that it was her pleasure to attend ie Councilor District meetings and she is interested in ttending those in which county auxiliaries have not een organized.

Mrs. Jones requested permission for herself or a repre-entative appointed by her to attend the MSMA Com-iission and Committee meetings. She indicated that this a common practice in surrounding states.

The above request was discussed, and it was the eneral feeling that this matter should be discussed fur-ier by the Auxiliary.—**Referred to Reports of Officers ommittee.**

REPORT OF THE AD HOC COMMITTEE ON CONTINUING MEDICAL EDUCATION

Dr. Paul Young reported that the AMA Third Na-onal Conference of State Medical Association Repre-entatives on Continuing Medical Education was held in)ctober. The main subjects covered during this Con-erence were (1) Accreditation CME, (2) Curriculum or continuing medical education, (3) Peer Review and 4) Choice between voluntary or compulsory CME. He ndicated that the AMA wants to delegate to state hapters the responsibility for CME accreditation. Dr. oung reported that curriculum for CME was discussed great deal. He indicated that he would like to have ome input from the new UMKC School of Medicine in egard to curriculum.

Dr. Young reported that in regard to peer review, Iissouri has moved on the road farther than most ther states. Our plan in Phase 2 considers it an im-ortant approach to have our continuing education pro-ram linked to peer review.

Dr. Young stated that various things had been tried n some states in regard to the choice between volun-ary or compulsory continuing medical education.

Dr. Young reported that a workshop for members of is ad hoc committee, as well as representatives from he Councilor Districts, is being planned for February -3 and will be held in conjunction with the Public ffairs Conference. He asked for Council approval to roceed with this. The subject of a budget for this vorkshop was mentioned and Dr. Young said that a naximum budget of $500 or less should be sufficient.

Discussion followed on some of the points mentioned y Dr. Young. He suggested to the Council that a long ook be taken at ways in which to develop an effective ontinuing medical education program and that he be iven permission to proceed to develop a long range udget for a continuing education program. He indicated hat in California, each member was assessed $10 a ear for this program. He stated that changes in the udget of the State Medical Association might need o be made.

Motion was made to instruct Dr. Young to proceed with a workshop in conjunction with the Public Affairs Conference. Motion was seconded and carried.

Motion was made and seconded that Dr. Young be given permission to develop for consideration a long range budget for a continuing education program. Motion carried.

Dr. Young reported that the Committee had discussed acupuncture. He indicated that the committee discussed the MSMA news release and the similar policy statement of the State Board of Registration for the Healing Arts to the effect that acupuncture is the practice of medicine. It was noted that the AMA and the Federal Government are conducting research on acupuncture.

Dr. Young read the following statement regarding acupuncture developed by the Committee:

"The application of acupuncture as a modality to relieve human suffering is clearly an issue which physicians in the state of Missouri, the nation and the world must recognize. It would appear that where it is now being used, it is used on a purely empirical basis. However, if we ascribe to the principles of allopathy, then we must consider its possible benefits to our patients.

"As with any empirical modality of treatment, great caution must be exercised in its use. Therefore, we recommend that acupuncture be considered as an experimental technique. Those physicians who wish to conduct experiments involving acupuncture should be guided by the same ethical and scientific principles which are applied to all experimentation in medicine. It is recommended that experimentation be carried out under the direct supervision of professionals who are well-trained in the basic sciences upon which the modern practice of medicine is based. It is recommended that physicians approach the issue of acupuncture with the same sense of critical inquiry which has characterized the medical profession since Hippocrates."

The motion was made and seconded to accept the statement on acupuncture. During discussion, the following amendment to the statement was presented:

> ". . . that anyone doing acupuncture confer with the AMA Section on Anesthesia for their experimental protocol and to follow this protocol and report their results."

Motion was made by Dr. Hetlage and seconded to table action on this statement and proposed amendment. Motion carried.

The next portion of Dr. Young's report was concerned with the employment of medical students in physicians' offices for the summer months. The Committee presented the following two points in regard to this subject: (1) Suggest to the MSMA Council that Dr. Young be authorized to represent MSMA in negotiations with the other three sponsors of the SAMA Summer MECO Program and (2) the same four sponsors would then assume the responsibility for possible implementation of the program in the summer of 1974. Dr. Young also indicated that guidelines to implement this program would be set up.

Motion was made and seconded to give Dr. Young the authority to represent MSMA in the implementation of this program. Motion carried.

Dr. Young next reported on EKG computer interpretation. He stated that the members of the committee felt that they did not have the appropriate expertise to deal with this problem and, therefore, recommended that a study group be formed including a cardiologist, a general physician and two or more internists and, also, include Dr. Ben McAllister and Dr. Russell Sandberg. Dr. Cope stated that it was his opinion that if Dr. Young wished to appoint a subcommittee to study this problem he would be perfectly in order.

The last item in Dr. Young's report was a letter from Dr. Maxwell Berry requesting CME core curriculum. Dr. Young pointed out that this letter had been directed to the Council for action.

Motion was made and seconded to refer this letter to the Ad Hoc Committee on Continuing Medical Education. Motion carried.

Dr. Franklin moved that Dr. Young's report be accepted. Motion was seconded and carried.—**Referred to Medical Education and Public Welfare Committee.**

REPORT OF INSURANCE ADVISORY STUDY COMMITTEE

■ Mr. Fox reported that the Council had directed the formation of this committee and that a meeting had been held recently. He stated that representatives from insurance companies were invited to the meeting. After discussion, they recommended that the three MSMA existing programs (disability, major medical and accidental death and dismemberment) be continued as they are now written. Mr. Fox indicated that the committee had studied some new programs (term life, overhead, excess major medical). The committee recommended that these programs be studied further. It was pointed out that the AMA and the large metropolitan medical societies have their own insurance programs.

Dr. Hansbrough moved acceptance of this report. Motion was seconded and carried.

Dr. McAlhany suggested that, possibly, this committee could investigate some type of deductible insurance program. Dr. Bradshaw pointed out that the law regarding Workmen's Compensation had recently been changed so that anyone who has one or more employees will come under this program. He stated that this is a real hardship on those who employ professional people. It was suggested that this committee investigate insurance coverage under various insurance companies.

Motion was made to look into other health coverage plans other than the Blues and consider statewide coverage for MSMA membership. Motion was seconded and carried.

Dr. Cope referred this resolution to the Advisory Study Committee for report.

Dr. Bradshaw suggested that the staff find out what they can about the new Workmen's Compensation Law and report back to the Council. Dr. Cope directed that staff check into this and report back to the Council.

Dr. Thoma stated that St. Louis University comes under this program. Dr. Thoma indicated that St. Louis University is self-insured. He was directed to bring report on this to the next meeting.

REPORT OF COMMISSION ON MEDICAL-LEGAL AFFAIRS

Mr. Cooper reported that a summary of an excellent film, "Courtroom Confrontation," was shown at a recent meeting. The film is based on the landmark "Darling Case."

There was discussion at a recent meeting of this committee regarding video tape depositions. The Bar Association is going to attempt to have court rules changed to allow video tape depositions in court. It was pointed out that it depended upon the judge as to whether or not these types of depositions would be admitted as evidence.

The Committee suggested that the use of pre-trial screening panels for professional liability suits should be restudied. The Medical Association had studied this in 1970. At that time, it recommended that pre-trial screening panels not be used. A member of each organization represented at the joint medical-legal meetings will be appointed to serve on an ad hoc committee to study pre-trial screening panels.

Mr. Cooper stated that at the committee meeting it was brought out that the Buchanan County Bar Association had declined to accept the "Interprofessional Code." Since that time, however, they have changed their stand and accepted the Code.

Mr. Cooper reported that the medical examiner system was discussed and the committee agreed to continue the joint meetings.

Motion was made and seconded to accept this report. Motion carried.—**Referred to Constitution and Bylaws Committee.**

REPORT ON CARIBBEAN TOUR SPONSORED BY MSMA

■ Mr. Cooper reported that the cruise had been excellent and that the scientific program was very good. He read several letters commending the Association for the cruise and the scientific program.

Dr. Hansbrough moved that this report be accepted with commendation.

Motion was seconded and carried.

PROVOST FOR HEALTH AFFAIRS

Dr. Bradshaw reported that the committee (Drs. Bradshaw, Chandler and Gulick) appointed by Dr. Cope to suggest a recommendation for the position of Provost for Health Affairs would like to make the following motion:

"It is the unanimous opinion of the Committee that in recognition of the service Dr. William D. Mayer has given to the State Medical Association while acting as Dean of the University of Missouri School of Medicine-Columbia, that the Council endorse Dr. Mayer as a candidate for the office of Provost for Health Affairs of the University of Missouri." Motion was duly seconded and carried.—**Referred to Medical Education and Public Welfare Committee.**

PUBLIC AFFAIRS CONFERENCE

■ Mr. Swarens reported that the Public Affairs Conference will be held on Feb. 3-4, 1973 at the Ramada Inn in Jefferson City. The Woman's Auxiliary will hold its Board Meeting in conjunction with this Conference. All invited speakers have agreed to appear. Among the speakers will be Sen. Lem T. Jones, Jr., Rep. Richard J. Rabbitt and two AMA officials—one from Washington and one from Chicago. The Commission on Public Affairs would like to ask each Councilor to contact his county society officers and urge them to attend the Public Affairs Conference. Motion was made, seconded and carried to file this report as information.

COMMISSION ON PUBLIC AFFAIRS

Mr. Swarens reported that upon request from the Council, the Commission on Public Affairs investigated the use of mobile X-ray units for chest screening in Missouri. He stated that at the time of the Council request, the Tuberculosis and Respiratory Disease Society of St. Louis and Eastern Missouri was operating under guidelines which permitted mass X-ray screening. However, the Society has recently revised its guidelines to conform with policy statements of HEW, The Ameri-an College of Radiology and the USPHS, which urge aution concerning the use of photofluorographic X-ray nits for chest screening programs. The Society has disontinued mass screening, but will continue to offer its ervices to problem situations.

The Commission on Public Affairs endorses the new uidelines for mobile X-ray units as issued by the uberculosis and Respiratory Diseases Society of St. ouis and Eastern Missouri. Motion was made, seconded nd carried to accept the interim report of the Comission on Public Affairs and endorse the guidelines egarding Mobile X-Ray Units as set forth by the uberculosis and Respiratory Disease Society of St. ouis and Eastern Missouri.**—Referred to Miscellaneous ffairs Committee.**

BOARD OF REGISTRATION FOR THE HEALING ARTS

The Chairman called on Dr. Melvin Kasten, President f the Missouri State Board of Registration for the ealing Arts, to give any comments which he might ave. Dr. Kasten called attention to the September ouncil minutes and spoke on several issues contained herein. He stated that in regard to Dr. Martin's conern about the anesthesiologist from Canada who was censed in one of the Carolinas, the reason she could ot obtain a Missouri license was that her license in arolina was by reciprocity and not by examination, nd Missouri does not have reciprocity with Canada.

Dr. Kasten then spoke on the subject of absenteeism lips being signed by some physicians for people workng in industry when, in fact, the individuals were not l. This is expensive to industry. He stated that many eople appear in court and testify against these physiians. These physicians have been warned, but there sn't much the State Board can do.

Dr. Kasten stated that just recently the FLEX examnation was given to 195 individuals, of which about 40 were foreign doctors and about 45 were taking the xamination for the second time. In June, the FLEX xamination was given to 86 foreign graduates with 17 assing. Dr. Kasten indicated that the grading system f FLEX requires 75% on Part I and no grade lower han 60 and 75% on Part II and no grade lower than 0. He stated that the FLEX examination is costing he state money. The law now states that we can charge 25 for those taking Part I and $25 for Part II which s a total of $50. It costs the State Board $65 to give he examination. We hope that we can get this changed n the law.

Following Dr. Kasten's report, Dr. Hetlage brought p two matters of concern. One is the unsupervised use f transactional analysis in groups in which there is no sychiatric supervision. Some are cropping up and do eem to come under the realm of psychiatry.

The other item of concern is that at least in the t. Louis area, many discount houses and department tores have a nurse piercing ears. He indicated that this nay or may not come under the jurisdiction of the tate Board.

Dr. Kasten indicated that they have checked into the natter of piercing ears, but do not have the manpower r the money to check all of them. He indicated that e thought the Board had written to these stores, but as not certain.

Dr. Kasten stated that someone has brought up the uestion of whether or not the Board can license the raduates of the University of Missouri in Kansas City nder the present law. The law needs to be updated.

Dr. Mayer stated that we have very carefully avoided trying to change the State Registration Law for so long that we are now functioning with one that is definitely outdated. He indicated that all he was suggesting is that when the State Board does open this up for possible changes, that very strong input from the MSMA Council be made as well as strong input from the Medical Schools of this State.

REPORTS OF THE DEANS

In the absence of Dr. Guze of Washington University School of Medicine, who attended the meeting earlier, Dr. Gulick gave a brief report regarding their building and expansion program. Dr. Gulick indicated that they moved into the new Eastern Division about a month ago and are very happy with it. It holds 500 patients. These are replacement beds and not new beds. McMillan Hospital and the old Maternity Hospital are closing. They have approval to build a parking garage underneath a part of Forest Park which will hold 1,300 cars. Children's Hospital has a new addition. They are going to completely renovate Maternity and McMillan Hospitals.

Dr. Gulick reported the part-time faculty has been requesting representation on the Executive Faculty and they have elected one man to serve on the Executive Faculty, that one man being Dr. Gulick.

Dr. Mayer reported that his tardiness on the previous day was due to the fact that the Chancellor called a meeting of all deans of the Columbia campus, elected faculty council and council of the graduate faculty of the Columbia campus because the President was about to release the third draft on the role and scope of the University. He read to the Council the statements contained therein regarding the health professions, stating that in the area of the allied health professions at the University of Missouri at Columbia and Kansas City, they shall continue to expand as funds and facilities permit. Hopefully, this will enable us to move forward. The document further indicated that the University of Missouri at St. Louis needs to look at what it is doing in nursing and health professions. He stated that the two local Columbia papers recently carried much of this on their front pages.

Dr. Mayer stated that at the September meeting of the MSMA Council, he informed the Council that he had recommended a policy change regarding admissions to the University Hospital. No objections were raised by the Council at that time. Dr. Mayer stated he pursued this with the Chancellor, President and Board of Curators and the following policy statement was adopted in October: "Any person requesting medical care, special study or diagnosis may be admitted to the University Hospital. Admission may occur by direct request of a patient, by referral of a licensed psysician or through such other means as deemed appropriate under such rules and regulations as may be adopted."

Dr. Mayer indicated that at the present time, Dr. Noback was being visited regarding accreditation by the Liaison Committee of the Council on Medical Education of AMA and the Association of American Medical Colleges. Because Kansas City is a new school, it has a visitation almost annually. The University of Missouri has this visitation about once every seven years and such visitation had just been completed. It was reported in an informal way to the President, Chancellor and Dr. Mayer that they thought we had a good institution, very possibly on the way to being a great one, and commended us for the "remarkable" progress which has occurred during the last seven years. They indicated very directly that we should be proud of the School of Medicine in Columbia.

Dr. Mayer then commented on the reorganization. In October, the Chancellor received approval to reorganize his office. The Chancellor and Vice-Chancellor constitute the office of the Chancellor. On January 1, 1973 Dr. Walter Daniel, former President of Lincoln University, will assume the responsibility of Vice-Chancellor. Under the Chancellor's office, they have created three provost positions—Provost for Administration, Provost for Academic Affairs and Provost for Health Affairs. The Chancellor sees these five individuals as having the total responsibility for the administration of the Columbia campus and its 22,000-member student body. Dr. Mayer stated that he felt it very significant that they did include health affairs in those five. Under the Provost for Health Affairs will be the Director of the University Hospital, the Dean of the School of Medicine and the Dean of the School of Nursing. Consideration is being given to the establishment of a Dean of the School of Allied Health. If such becomes a reality, this, too, would be under the Provost for Health Affairs.

Dr. Thoma indicated that St. Louis University is engaged in a building program. Its main activity has been in nailing down its affiliation with DePaul Hospital. Affiliation will be a complete one. A medical director has been appointed. They are undergoing a $6 million building program. Affiliation of OB-GYN services has already begun. If all goes well, they anticipate not having an obstetrical service immediately in the University Hospital. It is anticipated in the next decade that Firmin Desloge will be phased out as a secondary care hospital. They are not adding beds, but simply upgrading the ancillary services and putting in better specialized services, such as radiation services, etc. An all-weather bridge is being built to Bethesda Hospital. They intend to use Desloge for tertiary care only. DePaul will have a 500-bed hospital in their final building program. The Kingshighway site will be converted to a community health center. It is hoped that this will be both a University service and a private practice community center.—**Referred to Medical Education and Public Welfare Committee.**

HCFM PROPOSAL TO MRMP

■ Chairman Cope called on Mr. Mark Halvorson, Executive Vice-President of the Health Care Foundation of Missouri, to present its proposal to the Missouri Regional Medical Program. Mr. Halvorson pointed out that the HCFM has been negotiating with MRMP regarding the funding activities of the Foundation. These activities have related to a data development project that was preliminary to a proposal for a grant from MRMP which will extend over a three-year period beginning in September, 1973. Council endorsement of this three-year project is being sought.

The nature of the project is to develop appropriate criteria and guidelines for evaluating the quality, accessibility and costs of medical care and defining areas of educational needs within the health care delivery system in Missouri. The title of the project is "Quality Criteria for Medical Care Evaluation." Mr. Halvorson then explained the goals, objectives and methodology of the project, indicating that this project is to continue the development of a Medical Care Evaluation Model. Mr. Halvorson stated that during the past three to six months, the HCFM has been working on a preliminary or experimental project in cooperation with MRMP This experimental project was designed to determine i HCFM could develop a data base that would assist i the development of a medical evaluation model. Thi data base is now in the process of being developed.

Mr. Halvorson reported that the project has bee endorsed by MAOPS, Mid-Missouri Areawide Comprehensive Health Planning Agency, State of Missouri Department of Community Affairs, Missouri Hospital Association and numerous other interested medical organizations that have agreed to cooperate on the project i their assistance and cooperation is sought. He stated that Council approval of this project will be sincerely appreciated and endorsement of this project by the Council will be an important factor.

Dr. Bradshaw asked for an approximation of th number of cases that the Foundation has reviewed t date. It was reported that as of August 31, 223 case had been reviewed and there are currently about 6 cases in process. Of those, some 83% were cases submitted by health insurance carriers and a small percentage by physicians. He stated that this only give them a start on a data base.

Mr. Halvorson reported that a survey questionnaire was sent to the participating members of HCFM on an experimental basis. He stated that in the future, they can foresee the development of specific surveys, perhaps by specialties, asking more specific questions relative to selected days and patient management of those days. We need and request full physician interest in these surveys so that the focus can be on what educational programs might logically be developed.

Dr. Hansbrough indicated that one physician submitted 51 cases and all were ruled in favor of the physician. He stated that he felt that in terms of volume of cases, each was reviewed separately and should be recorded as 51 individual cases, thus raising the numbe of cases which the Foundation found in favor of the physician. Mr. Halvorson indicated that in terms of volume, each one was reviewed separately, but in term of their record keeping, they include him as one massive case. Dr. Hansbrough indicated that he felt these should be recorded as 51 separate cases. Mr. Halvorson stated that of the total cases about 50% are in favor o the physician and about 50% in favor of the carrier.

Discussion followed as to whether or not this projec had been approved by the CHP (a) and (b) agencies Dr. Rikli indicated that he felt they had a favorable report back from the A agency.

Dr. Miller stated that the total number of cases reviewed is quite different from the relatively few physicians involved. He said this also brings to note the big concern of the HCFM in its activities so far, namely insufficient experience in reviewing cases. He said this is due to a host of reasons.

Dr. Miller called attention again to the fact tha PSRO legislation has been passed as of October 27 as part of HR 1. The HCFM has had some foresight in developing a structural organization that will possibly accommodate this and will put us in the forefront in health care activities to accommodate this legislation.

Dr. Miller moved that the Council endorse the project report as submitted by Mr. Halvorson. Motion was seconded and carried.—**Referred to Resolutions Committee.**

KIDNEY DISEASE PLAN

■ Dr. Cope called on Dr. John F. Maher, Professor of Medicine (Nephrology), University of Missouri-Colum-ia. Dr. Maher indicated that a group of physician-aders in the field of nephrology have developed a omprehensive Multi-Regional Kidney Disease Plan for ansas, Missouri and Southern Illinois, which is now eing submitted by the Kansas, Bi-State and Missouri egional Medical Programs in the form of a project roposal for funding by the Regional Medical Programs ervice of HEW. Dr. Maher stated that kidney disease the fourth leading killer, but the National Kidney oundation is 19th in contributions. Many times, kidney isease does not come to the attention of physicians at time when it could be properly treated. He stated iat when most of those present graduated, there were nly two nephrologists in the country. There must be iore postgraduate education for the practicing nehrologists.

Dr. Maher stated that they find that patients who ve in the St. Louis area may go to Kansas City or olumbia and patients in Kansas City sometimes go to t. Louis. It is felt this is inefficient, especially when person needs dialysis three times a week. He also indiated that at times the staff is overworked to a point here there is concern regarding fatigue and at other mes, the work load is too low. He stated that a registry nd inventory of dialysis facilities and patients in need f therapy will help straighten these things out. He id that in order to transplant, they need to identify iose individuals who are compatible and need to find onors where they can.

Dr. Maher stated that they also have a problem of ne laboratory identifying the characteristics of an indiidual. They send the kidney and find that when it ets to the other laboratory, it doesn't work. We want have all laboratories use a common system for all e potential recipients and have the Kansas City laborary function as the reference laboratory so that kidneys in be taken from anywhere in this region.

Dr. Maher said that in order for this program to work, ey cannot have the transplant surgeon go after the onor. This would mean considerable travel and loss of me. They would like to identify and train organ prourement surgeons in many areas throughout the region.

On motion of Dr. Hetlage, duly seconded, the Counil endorsed the project as spelled out by Dr. Maher.

PROJECT REGARDING CLINICAL NURSE ASSOCIATE

Helen Yeager, M.D., Assistant Professor, Department f Pediatrics at the University of Missouri, Columbia, resented to the Council a proposal submitted to the lissouri Regional Medical Program for development f a program to define the role of a clinical nurse ssociate for neurologically handicapped children. This roject is being submitted by the Department of Peditrics and the Department of Nursing. Dr. Yeager indiated that their interest is to try to determine for what le the nurse can be trained to perform to care for iese children. She emphasized that this is not a traing proposal, but a planning proposal. She indicated iat they are asking for funding for two degree nurses develop clinical experiences and to evaluate the alue of academic courses in preparing the nurse for e role of specialist in the care of neurologically handiapped children. The purpose of this project is to define ays in which a nurse with expanded responsibilities s a Nurse Associate can enrich health programs for eurologically handicapped children. Also, resources pen to the nurse for her training in these areas will e explored.

On motion, duly seconded, the Council agreed to endorse this project proposal.—**Referred to Medical Education and Public Welfare Committee.**

PROGRESS REPORT ON CONSUMER HEALTH INFORMATION PROGRAM

■ Dr. Rikli, Director of the CHIP Program, indicated that this program had been in the making for approximately three years and that when the proposal was funded, a letter was sent to MSMA bringing this proposal to our attention and that it is getting underway. He stated that copies of this program are available.

Dr. Rikli stated that three areas now have consumer health information centers. These areas are Salem, Warrensburg and the metropolitan area of Kansas City. The center in Salem includes the three-county area of Iron, Reynolds and Dent counties. The specialist in the Salem area is Mr. Jim Bryan. Mr. Bryan is a graduate of a health education course at the University of Missouri. The health information specialist spends about six weeks in preparation and then is sent into the area to get acquainted with the producers of health care services and with consumer groups.

The health information specialist in Warrensburg had been talking to various groups about the program. She was asked about poison control by one of these groups. She contacted the directors of the program and they supplied the necessary information to present to this group on how to control this problem.

Dr. Rikli indicated that the problems in Salem and Warrensburg are quite different than those in Kansas City. He stated that a nurse was selected to be the CHIP representative in Kansas City. He indicated that the main problem in Kansas City is helping people identify where they can get help with their health care problems. He stated that sensitive issues are being placed upon these people in these communities. He indicated that in one of the areas, there had been questions about the propriety of a physician operating a pharmacy and dispensing drugs from his office. He indicated that he felt that we need to recognize that these representatives are going to be faced with sensitive issues and hopefully, these can be brought to the attention of the appropriate organization for their consideration. He stated that the role of these CHIP representatives was not to give solutions to problems, but to obtain information for the parties involved and to help resolve their controversies.

During discussion, a question was asked as to whether or not Dr. Rikli felt that this program in any way conflicts with local and state health departments. Dr. Rikli stated that he felt that these programs complement each other and doesn't believe that they are competitive. Dr. Rikli indicated that the CHP "A" agency had expressed support for the program.

Motion was made and seconded that Dr. Rikli's report be filed. Motion carried.

Dr. Cope appointed the following to a committee to study the feasibility of inserting a year of continuing training in primary patient care in the state of Missouri: Dr. Bradshaw, Chairman; Drs. Noback, Gunn and Hansbrough.—**Referred to Miscellaneous Affairs Committee.**

REPORT OF THE BUILDING COMMITTEE

■ Dr. Matthews reported that a survey had been done and we now have clear title to the property. Title insurance has been purchased. The property has been purchased and we have taken possession of it. He stated that the architect had completed the drawings and we are ready to go ahead with the remodeling. He indicated that the building committee would like authorization to proceed with borrowing money to do the remodeling.

Dr. Matthews stated that costs of remodeling and furnishings will be somewhere in the neighborhood of $110,000.

Dr. Cope, as a member of the building committee, made a motion regarding the committee's request for authorization to borrow money for remodeling. Dr. Chandler, Vice-Chairman, took over chairmanship of the Council Meeting.

Dr. Cope moved that the Building Committee be empowered to negotiate, in its best judgment, a loan in the amount of $100,000-$110,000 for the purpose of remodeling and furnishing the property located at 113 Madison Street, Jefferson City, for use as the office of the MSMA and that the officers of the Association be authorized to sign the necessary instruments and papers to obtain the loan. Motion was seconded and carried.—**Referred to Reports of Officers Committee.**

REPORT OF THE COMMITTEE ON LEGISLATIVE AFFAIRS

■ Dr. Matthews stated that the committee had discussed numerous items and, generally, the items discussed were bills that have been pre-filed, most of which had been acted upon previously by the Council or the House. The immunity from liability for peer review physicians bill is in the works. A medical examiner system bill was introduced and calls for a pilot medical examiner system on an area-wide basis rather than on a statewide basis. The cost of a statewide system had prevented acceptance in previous sessions.

Another bill would allow embalmers to enucleate corneas. This would allow properly trained embalmers to enucleate corneas for transplants.

A proposed bill from the ophthalmologists providing for delegation of authority was discussed. This bill came about as a result of the Curteman decision. This bill would allow technicians to perform certain functions that had been delegated to them by a physician. The Committee and Council will support the delegation of authority bill.

Dr. Matthews stated that the committee had discussed the possibility of getting a sick doctor statute passed in next two or three years. The Committee would like Council approval to proceed with the planning of a sick doctor statute.

Motion was made and seconded that the legislative committee start developing sick doctor legislation. Motion carried.—**Referred to Miscellaneous Affairs Committee.**

AMA REPORT

■ Mr. Mortenson reported that an AMA membership project will be underway shortly in St. Louis City and St. Louis County. He stated that Missouri's AMA membership had dropped from last year. He urged everyone who can to attend a "National Leadership Conference" being conducted by the AMA in February.

Mr. Mortenson reported that Mr. David Weihaupt of the AMA will be coming to Missouri two or three times in the next few months to speak to groups about the AMA.

Mr. Mortenson indicated that Dr. Hoffman appreciated the hospitality extended to him during a recent visit to Springfield. Mr. Mortenson stated that all comments he had heard about the trip had been very favorable.

He stated that the legislative efforts of the AMA ar going to be shifted more toward state legislation.

REPORT OF THE PLANNING COMMITTEE

In the absence of Dr. Kerr, Chairman, Dr. Cope, member of the Planning Committee, gave the committee's report. Dr. Chandler, Vice-Chairman of the Council, took over the chairmanship of the Council Meeting.

The Committee feels that it needs direction regardin what its duties are. The Committee does not know if i is an action committee or just a committee to mak suggestions.

The first item discussed by the committee was Resolution #27, "Council Chairmanship." This resolution ha been re-referred by the Council to the Committee a the September Council meeting for reconsideration an a report before the Annual Meeting. The Committe tabled this resolution.

The next item discussed by the Committee was th possibility of a merger between St. Louis City and S Louis County societies. The Committee felt that th Council should be aware of this possibility and, perhaps develop ideas as to how this can be handled.

The third item discussed by the Committee was tha the Committee is of the opinion that strict adherence t tradition constitutes a continuing deterrent to the sustained involvement of competent and interested members of the Association. The Committee recommends t the Council that an appropriate study be made of thi problem.

Dr. Cope reported that the Committee recognizes th continuing problem of communications and suggests tha the Communications Committee: (1) Advocate the us of short, personal letters from Councilors to member of their Districts; (2) Maintain closer liaison with hospital staffs. He indicated that, possibly, a key ma could be appointed on each hospital staff to receiv and disseminate communications from the Association.

The Committee discussed the status of the Immediat Past-President. It was pointed out that the Immediat Past-President is neither an officer nor a councilor an requests that legal counsel furnish clarification of th Council status of the Immediate Past-President.

The Committee suggests that the Health Care Foundation study the possibility of developing a certifie hospital admission program.

The last item discussed by the committee was income-producing programs for the Association. Dr. Cop stated that the Association will have to have mor money in future years and that there is a limit as to hov much dues can be raised to finance the Association. Th Committee recommended that the Council study th feasibility of retaining competent management consultants to recommend possible income-producing program for the Association.

Dr. Hetlage stated that he would like to refer t Item #2 in the Committee report. He indicated that i Dr. Franklin agreed, he and Dr. Franklin would submi a statement at the next Council meeting as to what i going on in regard to the merger of St. Louis City an St. Louis County. Dr. Franklin agreed to do this, bu stated that he was not sure that they would get anywhere with this.

Dr. Hetlage indicated that relative to Item #3 regarding strict adherence to tradition that delegates from his District would be happy to testify before this committee with their ideas regarding this subject. He stated that this is the logical place to do it and that a representative group would come to explain their ideas.

Dr. Hetlage also made reference to Item #4 regard- ig communications. He indicated that during his Coun- lor District report, it was suggested that the AMA reen sheet be sent to a key man on each hospital aff to be placed on the hospital bulletin board in or- er to aid in communications with hospital staff mem- ers.

Following considerable discussion regarding this mat- r, the following amended motion was presented:

> Move that "the AMA green sheet be sent to a designated member of each hospital staff for posting on the bulletin board—that man being a designate of the Councilor in each District and that such mailing begin on Jan. 1, 1973 until April 1, 1973 and then be reevaluated at the annual meeting before further continuance." Motion was seconded and carried.

Mr. McIntyre requested that each Councilor send the ames of his designees in each hospital to the state ffice before January 1. Motion was made and seconded accept this report. Motion carried.

Dr. Cope stated that he liked the microphone system sed at this meeting and suggested that Staff look into ie possibility of getting such a system for the MSMA.

FINANCE COMMITTEE

Dr. Gulick indicated that the Council had given per- ission to borrow money for the remodeling and fur- ishing of the new building. He stated that, perhaps, ie Council would like to consider the possibility of lling up to $50,000 from our investment account for emodeling and borrow the rest of the amount needed. his would be quite a saving as far as interest on a an is concerned.

Motion was made and seconded that the Finance ommittee be authorized to sell a portion of our reserve ecurities up to $50,000 for the purpose of financing the emodeling of the new building. Motion carried.—**Re- rred to Reports of Officers Committee.**

LEGISLATIVE AFFAIRS COMMITTEE

Dr. Matthews stated that the Council needed to take ction regarding the removal of smallpox vaccination om the mandatory list of immunizations in Missouri. he Board of Health Committee recommended that this e removed from the mandatory list. The Board of lealth does not agree with the Committee, but will not ppose the bill. Dr. Matthews stated that he felt that ie MSMA should take the position that it does not ppose the bill, but does feel that the physicians should o ahead and immunize their patients as they see fit. He idicated that the Academy of Pediatrics has endorsed ich a bill.

During discussion, it was pointed out that during the ist few years, there have been more deaths and com- lications resulting from vaccination than from the dis- ase itself. Mr. Fox stated that a recent telephone poll f pediatricians indicated that they are divided about 0-50 on whether or not to continue mandatory vac- ination.

Motion was made and seconded that MSMA support non-mandatory smallpox vaccination position with in- ividual physicians continuing to immunize their pa- ents as they see fit. Motion carried.—**Referred to Mis- ellaneous Affairs Committee.**

NEXT COUNCIL MEETING

The next meeting of the Council will be held on Fri- ay, February 2 and Saturday, February 3. The Public Affairs Conference will begin Saturday afternoon and continue until noon Sunday, February 4. The meetings of both the Council and the Public Affairs Conference will be held at the Ramada Inn in Jefferson City.

A joint meeting of the Building Committee and the Finance Committee was called immediately following the adjournment of the Council Meeting.—**Referred to Reports of Officers Committee.**

Meeting of Feb. 2-3, 1973

■ James C. Cope, M.D., Columbia, Chairman, called the meeting to order. Those present were Drs. Cope; Walter T. Gunn, St. Louis; E. A. Stricker, St. James; John I. Matthews, Jefferson City; Charles R. Gulick, St. Louis; Gerald L. Miller, Kansas City; E. D. Imes, Maryville; R. A. Slickman, Kansas City; Lysle M. Bach, Hannibal; Max S. Franklin, St. Louis; Louis P. Hetlage, Troy; William D. Bradshaw, Clinton; R. Allen Chandler, Kansas City; Howard J. McAlhany, Springfield; Claude W. Cooper; Thayer; Eugene T. Hansbrough, Poplar Bluff; Stanley S. Peterson, Springfield; J. Loren Washburn, Versailles; Samuel B. Guze, St. Louis; George A. Thoma, St. Louis; William D. Mayer and William C. Allen, Columbia; R. K. Noback, Kansas City; Herbert R. Domke, Jefferson City; Mrs. Keith D. Jones, Warrensburg; Mrs. Jackie Watson, St. Louis; Messrs. Lee Mortenson, Chicago, Ill.; John Noble, Kennett; Allen D. Smith, Kansas City; Roger Weis, Kansas City; William Lindsley, St. Louis; Gary L. Schnedler, Springfield; Ray McIntryre, Tom P. Fox, Royal O. Cooper and C. C. Swarens, Staff.

COMMITTEE ON ARRANGEMENTS

The Chairman called the meeting to order and indicated that at the September, 1972 Council Meeting he had named the Committee on Arrangements—Drs. Franklin, Hetlage and Bach. However, no Chairman was named at that time. He stated that Dr. Franklin will be the Committee Chairman.

APPROVAL OF PREVIOUS MINUTES

Dr. Cope requested approval of the minutes of the Dec. 9-10, 1972 Council Meeting. On motion, duly seconded, the Council Minutes were approved as published.

TREASURER'S REPORT

Dr. Gulick reported that the audited account of the activities of the Association for the calendar year 1972 shows an excess of income over expenses. This is due largely to the increase in MSMA membership during the past year and more Journal advertising. In addition, some expenses were lower. The 1972 audit of the Association's accounts will be published in the March, 1973 issue of Missouri Medicine and will be included in the Delegates' Handbook for the 1973 Annual Session. On motion, duly seconded, the report of the Treasurer was approved.

EXECUTIVE SECRETARY'S REPORT

Mr. McIntyre said that the Editor of Missouri Medicine is appointed annually and usually at this meeting. On motion of Dr. Gunn, duly seconded, it was agreed that Dr. Finnegan be reappointed as Editor of Missouri Medicine. Dr. Fennigan will be requested to submit for Council consideration and approval members for the Editorial Board and Publications Committee.—**Referred to Reports of Officers Committee.**

■ It was pointed out that a news release was prepared and sent out with the approval of the MSMA President regarding the retaining of physicians under the 2.5% mandatory guidelines during Phase 3 of the Economic Stabilization Program, while freeing most of the rest of the economy from any mandatory guidelines. A copy of this also was sent to all Missouri Congressmen and Senators.

Dr. Cope indicated that Mr. Swarens was interviewed by Channel 8, KOMU-TV regarding the above and did a very nice job. He stated that it is gratifying to know that we can respond to this type of thing immediately.—**Referred to Miscellaneous Affairs Committee.**

■ Mr. Cooper said that the brochures regarding the MSMA-sponsored tour to Scandinavia in July, 1973 had been sent out and reported that as of Thursday, 25 responses have been received.—**Referred to Medical Education and Public Welfare Committee.**

■ For the past three years, the Association has honored the Missouri Congressional Delegation by having a luncheon in Washington in connection with the AMPAC Workshop. Mr. Cooper requested permission to hold this luncheon again this year, along with funding for same on March 9. On motion of Dr. Hetlage, duly seconded, it was agreed that this luncheon again be sponsored this year.

Mr. Fox reported on the development of a Quality Assurance Program (QAP) by the American Hospital Association. In drafting this, the American Hospital Association consulted with the AMA, the JCAH and also used the Michigan PAS Program. They are asking for MSMA endorsement of this program. The Missouri Hospital Association is holding an institute on February 19 in Jefferson City to go over this program. Also, the agenda of the Joint Commission on Hospital Accreditation will include this Quality Assurance Program at their meeting on May 11-13 at the Lake of the Ozarks.

Dr. Hetlage stated that this QAP was discussed at length during his Councilor meeting, but felt that they could not make a fair appraisal of this program without being fully and properly informed. They also felt that several of their physicians would attend the meeting in February. It was indicated that Dr. Ladyman will attend the meeting on February 19.

Mr. Fox reported that the Mini-Estes meeting this year will be held in Columbia on March 1 and 2. Registrations are coming in.

Mr. McIntyre stated that a PAS-MAP (Professional Activities Study-Medical Audit Program) Workshop will be held in St. Louis on February 22 at the Hilton Inn. The MSMA is cosponsoring this workshop again with no expense. It provides hospital staff members with an opportunity to learn techniques of using PAS System reports to carry out medical care evaluation studies. Dr. Vacca of St. Louis will attend and will represent Dr. Gunn in giving an opening welcome.—**Referred to Miscellaneous Affairs Committee.**

■ Mr. McIntyre indicated that Dr. Benoit, AMA Delegate and Chairman of the HCFM (Health Care Foundation of Missouri), could not be present at this meeting, but had written a letter to Chairman Cope with the following information:

> "I have been appointed to the AMA Advisory Committee on PSRO legislation as a representative of the Council on Medical Service, and our first meeting was held in Chicago on Jan. 12, 1973. This has been reasonably accurately reported in the AMA Newsletter, which I am sure most of the Councilors have read.
>
> "In addition to those people actually representin the AMA—such as the three members of the Counc on Medical Service, two members of the Council o Medical Legislation, three members from the Inter specialty Council, etc.—there were people there representing other organizations, although some of the were physicians. Dr. Schubert represented the Sacramento Health Care Foundation with their well know CHAP program espousing the benefits and exemplar goals of the American Association of Foundations fo Medical Care, about which I can assure you I hav many reservations and so does the AMA. The American Hospital Association and American Association Nursing Homes were well represented. The Illinoi Foundation for Medical Care and its HAS progra was extremely well represented by Dr. O'Donnell. Th National Association of Blue Shield Plans and Blu Cross Association were represented. Of considerabl concern to me was the fact that the American Osteopathic Association declined to have a representati serve on this Committee. The National Medical Association also was represented.
>
> "The Chairman of the PSRO Advisory Committe is Dr. Robert Hunter from the Board of Trustees. H came with fairly clear-cut instructions from the Boar as to the modus operandi of this Committee.
>
> "Various goals of the Committee's activity were outlined, and they will be dealt with by individual Tas Forces from the overall Committee. One Task Forc deals with the development of rules and regulation to implement HR-1; there will be a Task Force to loo into standards of care; another Task Force will loo into the geographical distribution of PSROs; and another will look at the structure of PSROs and ho they would best hope to function. Also identified a the meeting as a specific Task Force (but not listed i the final minutes, which bothers me) was one tha should devote itself almost exclusively to the distribution of information to physicians and the education o physicians as to the impact of this new legislation. I has been my observation, at least locally, that perhap 90% of the physicians are not aware of the impact HR- and the Bennett Amendment will have on the averag practitioner, and it has been viewed as relatively minor as compared with the passage of Medicare an Medicaid. In my personal opinion, the impact of thi new legislation on our patients and the way we car for them will be far reaching and of great importanc to both patient and physician.
>
> "I will, I am sure, be appointed to a Task Force, bu to which one I do not know at this point. There shoul be another meeting of the entire Committee in March and I would hope to be able to give a more detaile report of Task Force activity and overall Committe action at the Council Meeting just prior to the annua convention of MSMA.
>
> "Also at this time, I would like to give you some interval news regarding the Health Care Foundation o Missouri. We have contacted the Department of HE in an attempt to get as much information from them as we can to guide us regarding our future consideration as the PSRO agency for the state of Missouri. think it is fairly safe to say that probably there will b more than one PSRO established in Missouri, and according to the legislation, if, indeed, there is more than one in the state, then there will be a State Advisor Council to oversee the activities of the intra-stat

PSROs and be the reporting agency to the National Advisory Council provided for in the legislation. Having anticipated legislation of this type some three years ago, the Council would not be interested in knowing that the Health Care Foundation is undergoing a major restructuring of the Bylaws, which I think will provide a great deal more autonomy for each of the five currently existing Regional Review Panels and, hopefully, with proper funding, these individual regions can become separate PSROs in the future under the overall umbrella of the state organization."

Dr. Benoit further stated in his letter that regarding ie lawsuit brought by ten physicians in the St. Louis ea against the Council, individual members and officers the Association and the HCFM survived its first test ith a favorable decision by the judge for the dendants.

The question arose as to what other PSRO agencies e expected in the state. It was pointed out that there as a possibility that the present regions set up under ie HCFM might be expanded to a regional PSRO with itonomy to the HCFM and be separated only georaphically.—**Referred to Resolutions Committee.**

COUNCILOR DISTRICT REPORTS

District #9—Dr. Cooper indicated that everything ems to be going well in his District. They are holding Councilor District Meeting on Wednesday, February 8 at the Holiday Inn in West Plains. He invited those resent to attend.—**Referred to Reports of Officers Comittee.**

District #10—Dr. Hansbrough said that they have 00 physicians in the Tenth Councilor District which is egion E of the HCFM and have been discussing buildig their own autonomous organization under the HCF carry out the Bennett Amendment. They are studying foundation-type practice which seems to be working ell in other states. Regional review is very important as roblems are different in different regions.

Dr. Hansbrough reported further on the HMO being stablished in Lilbourn, Mo., which is to begin operation July. The Bootheel Housing Authority has the contract r this. They hope to obtain 200 families that will have repaid outpatient care. This is on an experimental bas. What they want to do is to see if somebody will unerwrite outpatient office care for a flat fee for a family. hey anticipate that this organization will pay a physian about $250 a year to take care of outpatient care r a family of four. They will charge the patient $1.00 r every office call and 20% of all lab fees. The physician ill be responsible for consultation fees. This is being one on a limited basis to see how they come out on a repaid outpatient care program.—**Referred to Resoluons Committee.**

District 8#—Dr. McAlhany stated that letters were ritten to the secretary and president of the State Board Chiropractic Examiners regarding chiropractic adversing in a local paper. A reply was received from their resident stating that this infraction would be brought the attention of their Board. Since that time, there has een no further chiropractic advertising in this local ewspaper.

Dr. McAlhany said that Senate Bill 122 (Medical Exminer Bill) was perfected in the Senate. As the bill is resently written, it concerns only Greene and Clay ounties, but other counties may participate if they so esire. He urged the key men to ask their representatives to support the bill. It was pointed out that not only a county, but a group of counties may go together.

Greene County held its annual orientation meeting for new members last month and Mr. Swarens was there. On January 26, Dr. M. D. Bonebrake was installed as President of the Greene County Medical Society.

Mr. Schnedler reported that for the second year, Greene County Medical Society put out a calendar in catalog form indicating hospital staff meeting dates, Greene County meetings and MSMA and AMA meetings. It has been very well received.

The suit Greene County has with IRS regarding the "Singing Doctors" is still pending.—**Referred to Miscellaneous Affairs Committee.**

■ *District #7*—Dr. Chandler reported that the Jackson County Medical Society President's Dinner was held on January 19, and Dr. C. Y. Thomas was installed as the new President. Dr. Chandler said that Dr. Thomas' speech was a tremendous one and recommended that it be sent to the MSMA Journal for publication.

Dr. Chandler said that he hoped to report further on the Mid-American Comprehensive Health Agency at the next meeting.

District #6—Dr. Bradshaw reported that things are fine in his district and reported no problems.

District #3—Dr. Franklin said that on January 13, Dr. Donald Judd was installed as President of St. Louis Medical Society and Dr. Richard Bradley as President-Elect.

On March 20, a discussion will be held during the St. Louis County and St. Louis Medical Society meeting in regard to a joint building. Tentatively, land has been selected—a 10-15 acre tract in west St. Louis County.

Dr. Franklin stated that he attended the Court hearing regarding HCF and was impressed with MSMA legal counsel.

At this point, Dr. Chandler indicated that he failed to mention one important item in his report. Jackson County has a merit award system and this is given infrequently to an outstanding physician who has contributed much to medicine. At the January 19 banquet, Dr. Miller and Dr. Benoit received such an award.

Dr. Franklin continued his report, indicating that the matter of the usual dance at the Annual Session banquet was brought up before the Council of his Society and also was discussed with Dr. Hetlage. He stated that it was their feeling that this is not essential and, perhaps, it would be better to open the hospitality rooms.

Mr. McIntyre indicated that Governor Bond has been invited to be the banquet speaker for Saturday night. We have not received a definite reply as yet.

Dr. Chandler stated that he felt to abolish the dance once and for all would be a mistake. It was pointed out that if there is no dance, it would be only on a trial basis to see how it worked out. The Chairman indicated that he felt this was a matter for the Committee on Arrangements.

Dr. Cope said that we are having fewer and fewer exhibits and felt that we may have to think about providing an area where people can gather and visit. He said that Mrs. Jones would say more about this.—**Referred to Reports of Officers Committee.**

■ *District #4*—Dr. Hetlage reported that he had had a good meeting with his county officers and delegates on Wednesday. A great many things were considered, but he said he would discuss some of them as the issues came up in the meeting.

He said that a discussion was held with Mr. Hughes regarding the new Open Panel Program that Blue Shield will propose and indicated that Mr. Hughes would be at the Council meeting to present that program for endorsement. The Fourth Councilor District passed a resolution which indicated that this Open Panel Program had been designed and prepared with a great deal of physician input. Dr. Hetlage assured the Council that they have had many meetings with Blue Shield in the past two years in regard to this. He said that the Fourth Councilor District agreed with it and unanimously endorsed it by a resolution.—**Referred to Resolutions Committee.**

■ The Fourth Councilor District passed a second resolution which reads:

> "The Missouri State Medical Association, Fourth Councilor District at a meeting duly called and held on Jan. 31, 1973, adopted the following resolution:
>
> *Resolved*, that the enactment of any of the bills now pending in the General Assembly of the state of Missouri for the regulation of health service corporations will not be in the best interest of the people of the state, including the more than 900,000 members of Missouri Medical Service and their families; and be it
>
> *Further Resolved*, that a copy of this Resolution be transmitted to the proper officers of the Missouri State Medical Association with the request that the Association take favorable action and aid in the opposition to the enactment of these bills."

Chairman Cope said that there would be a meeting of the Legislative Committee on Friday evening and, perhaps. Dr. Hetlage would like to bring this to their meeting.

Much time was spent discussing QAP. It was felt that there is a need to be more properly informed relative to this.—**Referred to Miscellaneous Affairs Committee.**

■ Dr. Hetlage said that another problem which arose was relative to Part A Medicare carriers. Doctors feel they are being imposed upon by the hospital administration and the Board of Directors to conform with rules and regulations that they say are forthcoming. In a talk to the administrators in Macon, it was indicated that carriers would review the Utilization Committee findings. If they felt there was prolonged hospital stay, they could reject all or part of the stay and according to the House Rule #1, the hospital would have no recourse against the family for paying the bill. Dr. Hetlage reported that he would have more information on this later.—**Referred to Resolutions Committee.**

■ Other matters discussed by the Fourth Councilor District were suggested changes in Narcotic Laws, which it was decided would be handled best by resolution to the Assembly, and suggested similar direction from county societies. Dr. Allen Klippel was named President of St. Louis County Medical Society and Dr. John Soucy was elected as President of St. Charles-Lincoln County Medical Society.

Dr. Hetlage indicated that his District felt that the Council should discuss the matter of a stand on abortion relative to the Supreme Court decision of January 21.

Chairman Cope stated that the MSMA House of Delegates had taken a stand on this to the effect that an abortion should only be performed by a licensed physician in a licensed hospital.

It was pointed out that this particular stand should be reiterated and that there should be protection for the physician who chooses not to do abortions.

Dr. Miller stated that they had asked a legislator to discuss this. It was his opinion that the Supreme Court decision will have no impact on existing state statutes until such statutes are challenged in view of this decision. Fundamentally, we are still in a status quo and do not think this changes our position.

Mr. Noble reported that it was his understanding th the Attorney General is working on this question no and that there should be an opinion from his office rel tively soon.

Dr. Domke indicated that it might be well to try to g a statute quickly which indicates that abortions be pe formed only in licensed hospitals. Discussion arose as whether or not it would be feasible economically to r quire that all abortions be done in licensed hospital since many things are required upon admission. It w pointed out that the physician could indicate that som procedures not be done, so that the cost would not b prohibitive. Discussion indicated that in the future som might be done in surgicenters. It was stated that th Council could not alter the stand taken by the House Delegates on this matter.—**Referred to Miscellaneou Affairs Committee.**

■ Dr. Hetlage also mentioned that St. Louis City an St. Louis County are considering a joint building and i dicated that they do have common problems, but do n feel that this is a political threat to either society.—**Re ferred to Reports of Officers Committee.**

■ *District #5*—Dr. Cope said that Dr. Vernon Wilso has returned to the University of Missouri in the capacit of Professor of Family Medicine and Community Health.

REPORT OF THE PRESIDENT

Dr. Gunn reported that as per Council action, a lett had been sent to the University of Missouri suggestin Dr. William D. Mayer as a candidate for the new pos tion of Provost for Health Affairs on the Columbia cam pus.

A letter was received from the Illinois Medical Societ inviting our MSMA President or his representative to at tend its annual meeting. However, the meeting date conflict with our own.—**Referred to Medical Educatio and Public Welfare Committee.**

■ The State Board of Health had requested that th MSMA designate a representative to serve on a Techni cal Advisory Committee for Medical Communications t review existing communications proposals relating t emergency situations. The MSMA proposed the name o Dr. Allen P. Klippel, St. Louis.—**Referred to Miscel laneous Affairs Committee.**

■ The Cancer Society had asked the MSMA to endors its program for Pap Tests. A task force to stress the im portance of Pap Tests for the early detection of cervica cancer in women of Missouri has been formed.

Dr. Hetlage stated that he would go along with en dorsing the goals of this program, but would like to kno how they intend to go about it. This was then put in th form of a motion, "move that we endorse the goals o this program, but would like information on how it wil be accomplished." This was duly seconded and carried.

Dr. Gunn said that a letter regarding a grant applica tion had been received from the American Academy o Pediatrics. The Chairman indicated that this would b referred to the proper committee for study.—**Referre to Medical Education and Public Welfare Committee.**

■ It was indicated that Mr. Swarens had written a proposed news release regarding pledge cards sent in b physicians relating to their restricting use of amphetamines and other stimulant drugs. On motion of Dr. Bradshaw, duly seconded, it was agreed that this be release as proposed by the 1972 House of Delegates.

Dr. Gunn said that he had just learned that Dr. Wiliam Macon, St. Louis, was accidentally killed by a gunshot wound the previous day. Dr. Macon was President-Elect of the Southern Medical Association.

It was pointed out that the program for the Large and Small Hospitals meeting in March had been sent to the presidents and secretaries of component societies and also there was a full page in the February issue of Missouri Medicine in the yellow pages.—**Referred to Miscellaneous Affairs Committee.**

REPORT OF COMMISSION ON MEDICAL ECONOMICS, THIRD PARTY MEDICINE AND GOVERNMENTAL RELATIONS

■ Dr. Peterson reported that the Commission had held a meeting with representatives of Aetna Life and Casualy present on Jan. 11, 1973. He stated that Aetna is one of the carriers who have provided medical care coverage which covers more or less everything. They have guaraneed in their contract that they will pay the UCR. They have developed prevailing fees by specialties within posal zip code areas, using an area between the 75th and 92nd percentile updated at least every three to six months or whenever somebody made a complaint about t with no consultation from physicians about it at any point. He said that Aetna put out the letter which you have heard about which says that if the patient has not had prior discussion with the physicians about the fee, hey should not pay any additional fee to the doctor and f the physician sues, Aetna will pay for legal defense to he patient. The letter evidently was put out as a specimen copy and, supposedly, was used on the East Coast and in Texas and not anywhere else. Aetna has sold the physician services without asking them if they will be bound by the contract which Aetna has written. The Commission feels that they have now convinced Aetna hat this is what they did. There are other companies hat are probably doing the same thing. Dr. Peterson inlicated that Aetna and presumably other companies involved in this will agree to talk about things now before hey do them in the future.

Dr. Peterson said that he had discussed the "float" with many health insurance agencies and they all disclaim it. This is the business of not paying claims as soon as they are received in order to receive more interest on their money while in certificates of deposit.

Dr. Peterson said that Aetna reported that 70% of their claims are clean claims and are processed within three o five days. For all practical purposes, there is no float at all. Dr. Hetlage said that his office had analyzed their nsurance claims for 1972 and it showed that it took Aetna 45 to 60 days to pay their claims. Some insurance companies paid in less time and others took considerably more.

Dr. Peterson indicated that, in the January issue of Missouri Medicine, anyone having any unsatisfactory claim problems was asked to report them to the MSMA Office and only one was received. He said we must have some statistics in order to do anything and back up our claims. It was suggested that possibly a statewide questionnaire regarding length of time to clean up claims would be in order. Dr. Peterson indicated that this portion of the report was for information and did not feel it needed approval.

Dr. Peterson said that an ad hoc committee had been set up to study the Medicare situation concerning the furnishing of an itemized statement to the patient to enable him to collect benefits from Medicare and, in turn, pay the physician for his services. Earlier, the Commission had recommended that the selection of all alternative methods of collecting charges from the Medicare patient is the responsibility of the treating physician and that the patient should not have the option of demanding direct payment to himself for a physician's services. To support this, the ad hoc committee developed the following resolution which was unanimously adopted by the Commission:

> Whereas, There are two alternatives by which a physician rendering service to a Medicare beneficiary may secure compensation,
> 1. Taking an assignment.
> 2. By non-assignment and billing the patient directly.
>
> Whereas, By non-assignment method the physician must issue a sufficiently itemized receipted bill if the patient has paid his bill.
>
> Or, issue a sufficiently itemized non-receipted statement by which the patient may then be paid directly by the Medicare carrier.
>
> Whereas, It is not uncommon for some Medicare recipients who receive itemized non-receipted bills to collect from the Medicare carrier and fail to meet their financial obligation to the physician,
>
> *Be It Resolved,* That it is the physician's option to use either alternative he chooses in keeping with his judgment of the patient's needs and the intent of the patient in meeting his obligations to the physician.

After brief discussion regarding this resolution, it was agreed to recommend amendment to the RESOLVED portion of the resolution to read as follows: "BE IT RESOLVED, That it is the physician's option to use either alternative—assignment or direct billing—he chooses in keeping with his judgment of the patient's needs and the intent of the patient in meeting his obligations to the physician."

It was moved and duly seconded that this portion of the report be approved as amended above. Motion carried.

Dr. Peterson said that the remainder of the Commission meeting was spent discussing a draft of Constitution and Bylaws for an organization that could represent physicians in their dealings with employers and third party carriers and fiscal intermediaries, and stated he would now discuss this in his ad hoc committee report.

REPORT OF THE AD HOC COMMITTEE FOR THE NEGOTIATION OF PROFESSIONAL FEES

Dr. Peterson gave a brief background on the original charge given to the ad hoc committee following the passage of a resolution in the 1970 House of Delegates which directed MSMA to set up the mechanism for the negotiation of not only professional fees, but also the rules, regulations and procedures that establish the conditions under which the physicians render their services. This resolution further resolved that the Delegates to the AMA be instructed to establish a similar mechanism at the AMA level. This ad hoc committee was set up under the parent Commission of Medical Economics, Third Party Medicine and Governmental Relations. Dr. Peterson was named the Chairman. Dr. Peterson and Mr. Noble made a trip to Chicago to discuss this with legal counsel of AMA. It became apparent at that point that the AMA's policy was not to promote unionism. However, they were desirous of being kept informed of the activities regarding this.

As activities proceeded in this field, it was apparent that MSMA legal counsel did not have sufficient time to devote to the project and Mr. Max Lilley, a Springfield attorney, was employed.

The first approach was toward the establishment of a mechanism within the MSMA to accomplish this. Many other associations concerned with the problems of doctors in this area were investigated and several of their meetings were attended. Both Dr. Peterson and Mr. Lilley discussed this matter with a great many people involved in medical unionism. Since that time, legal counsel made an extensive brief of our legal position and informed us that as a not-for-profit corporation, the MSMA cannot be involved in union activities. Therefore, he felt that a non-incorporated association should be formed by the doctors to carry out the purposes intended.

Dr. Peterson said that there has been a great amount of interest in this. The AFL-CIO now has 11 physician groups organized under the Service Employees Union and after reading these contracts know that a service employees union is not the way for the physicians to go. The Constitution and Bylaws, which were distributed to the Council, will, in the Committee's opinion, let us have in the state of Missouri a doctors' guild which is responsive to the MSMA and will not put us in a position of ruining our image any more than it has been. In fact, it will perhaps enhance it. It will give us a strong voice so that when the MSMA says this is a desirable situation, we will have an arm that can say this is the way we will do it, which we presently do not have. Dr. Peterson said that over the past several months, the Council has said go ahead and bring us a mechanism and this has been done with these Bylaws. We will need members who are willing to spend time, energy and money to really make this go. He said he felt that this is a working document that can be what the House of Delegates requested—a mechanism that will make it possible to do this.

Dr. Peterson said that he would not defend any specific paragraph of the Constitution and Bylaws as being the last word, but it is the last word of the six members of the Ad Hoc Committee on Negotiation of Professional Fees. It is the unanimous opinion of the members of the ad hoc committee and of the members of the Commission who were at the meeting that this is a working document that will do what the House of Delegates asked.

Dr. Peterson said that what one must get used to is the fact that a physician cannot act toward his patient as a union. He can act only to a third party employer who is hiring him as a group in an employer-employee relationship, not as a single contract between patients. There is an absolute differential between these two. We are not talking about a private physician's agreement with a patient, but we are talking about hiring out to an HMO to do this on a per capita basis.

It was pointed out by Dr. Bradshaw that the President of the AMA says that the final alternative of unionism is strike or withholding services. The Bylaws' general structure is misleading. He stated that he would be opposed if this were sent to the House of Delegates.

Dr. Peterson said that a multitude of things are done before strikes. He stated that to every physician he knew, his first responsibility is to his patient. You will not find anything here or in any conversations next week that says doctors should withhold their services from patients. The people doctors are going to withhold their services from are the people who are telling us how to care for these patients and how they are going to pay us. We have no other mechanism which will make one able to put teeth in the pronouncement that "the doctors of this country will not stand for this sort of treatment."

It was agreed that we need a negotiating mechanism, but some felt that if originally services are withheld from intermediaries, eventually it could be patients. Dr. Bradshaw stated that he would like to see us pursue the HCFM to the point of seeing that many of these problems are resolved in this area rather than creating a guil
or union.

Dr. Hansbrough indicated that unions of professiona
are now at the lowest esteem. He said that he felt
would be better if we were the 30th state than the fir
one. At the present time, this guild is geared primaril
toward the salaried physicians. He sees this as being
least three years hence. He, therefore, would recommen
that the committee be commended on this fine work an
recommended that we hold the bylaws as written for th
Guild for action at an appropriate time in the future.

Dr. Hetlage stated that he disagreed with Drs. Brad
shaw and Hansbrough. He said that although he did n
totally agree with the Constitution and Bylaws as pr
sented, he feels that the physicians must be able to spea
with one voice, which they cannot do at the present tim
and that third party carriers take advantage of it. H
stated that he felt that Article I should be carefully r
written to specifically confine it to third party carrie
and employers. He said the matter in his area has bee
so widely publicized that he feels it must come befo
the Delegates at the Annual Session so they can hear th
information, discuss it and make some type of decisio

Discussion followed as to whether or not this matte
would appear before the House of Delegates. It w
pointed out that this is a Commission report and will a
pear in the Handbook with or without Council approva
However, the Council can make such recommendatio
as it cares to make regarding the report. All would the
go to the House of Delegates. Dr. Hetlage stated that h
has a great deal of confidence in the House of Delegat
and feels that it should be discussed, but, in some ma
ner, implied that we feel the concept and the Constit
tion and Bylaws might as yet be immature and that th
whole matter might be well considered and discusse
but the mechanism not be implemented during this ne
year.

Dr. Peterson stated that Missouri is not first. Some 25,
000 doctors are already involved in an operation lik
this. Some are in medical association-sponsored type o
ganizations.

Dr. Franklin indicated that at this time, at least, h
would have to regard this guild or union as another splin
ter group, possibly because he is not adequately i
formed. He said that as a Councilor, he would bring th
matter to the Council of the St. Louis Medical Societ
and to the Delegates of his Society and, of course, he w
have to go along with whatever they decide should b
done.

Discussion followed regarding the mechanism for join
ing this Missouri Physicians' Guild. There is no Missou
Physicians' Guild at this time. Dr. McAlhany reporte
that a Springfield newspaper indicated that the Missou
Physicians' Guild is a charter member of the Americ
Federation of Physicians and Dentists. This, apparentl
was an error in reporting.

After further discussion, it was moved and second
that this report be filed in light of education and car
no endorsement of the Council whatsoever. Motion ca
ried.

Dr. Peterson said that in the course of going to sever
meetings, it became apparent that there are a number o
groups which are already organized and going forwa
with union activities. The first meeting was in San Fra
cisco and the last one in Las Vegas. Dr. Peterson is th
President of the American Federation of Physicians an
Dentists. He indicated that he would presume that

lissouri ever has a Missouri Physicians' Guild, that he ould do his best to have them become a member of the merican Federation. There has been considerable pubcity on this and there will be much more.

The question was raised as to what this Guild might hieve that our present Health Care Foundation could ot. It was pointed out that, at the present time, this uestion could not be answered. There is a host of renoation going on in the structure of this now. It is conivable that it might get into some of this, but impossble to say at this time.

Dr. Cope indicated that he could find nothing that inicated that the Guild, in order to come into existence, quires endorsement of the MSMA, and that if physians wanted to start the Guild, it would immediately beme existent. It was indicated that this is true and ISMA endorsement is not required.—**Referred to Resoitions Committee.**

REMARKS OF DIRECTOR OF DIVISION OF HEALTH

■ Dr. Domke indicated that he would like to report on veral policy positions taken by the Board of Health in gard to a reorganization plan for the State Government. He stated that the Board has again affirmed its potion that there should be a Department of Natural Reurces with engineering functions regarding environiental health and it should be coordinated with the Dision of Health in environmental health surveillance.

The next item reported was that the Crippled Chilren's Service would be transferred from the University Missouri to the Department of Welfare under the tate Reorganization Plan. During discussion with the niversity, it was agreed that this service would be betr assigned to the State Division of Health. This has een so reported to the Senate Committee studying the eorganization Plan.

Under the reorganization plan, the State Board of ealing Arts and other licensing groups would be asgned to a Department of Consumer Affairs and Regution and would be completely separated from health. was felt by the Board of Health that these could be etter coordinated into the Department of Social Serices. This was reported to the Senate Committee.

Another matter brought before the Board was in rerd to the Cancer Commission. It was the feeling of the oard of Health, in concurrence with the Cancer Comission, that with the national effort to extend cancer ontrol activities to the different areas of the state, that e Cancer Commission should be given more responsiility than it had been given under the reorganization lan. This was delivered to the Senate Committee. Dr. omke also indicated that the Department of Social Serices would more or less replace the Health and Welfare epartment.

Dr. Domke stated that the Board of Health had acepted an invitation from the Governor's Advisory Counl on Comprehensive Health Planning to operate an gency to implement a statewide emergency services lan. The Board agreed with reservations about how far eir activities could go in relation to legislative matters. he Board established a Communications Committee ith Mr. Hamilton Reid of Baptist Memorial Hospital in ansas City as Chairman. The Committee is attempting develop recommendations in regard to a statewide nergency system and develop a system that will be chnically capable of handling developing needs of this rvice.

Dr. Domke stated that the Board had taken no position as yet on paramedical personnel. He reported that bills had been introduced in the Legislature to delete mandatory smallpox vaccination from state statutes.—**Referred to Miscellaneous Affairs Committee.**

■ Dr. Domke stated that he would like to refer to one item that might require action of the Council. He indicated that it is general knowledge that the Administration is proposing major changes in federal funding to a variety of health programs. He said that as of July, changes would be made in children, youth, maternal and infant care programs. Dr. Domke stated that the Division of Health would have to make policy determinations and program determinations and would very much like to have the advice of this Association and other groups.

He reported that the physician manpower report has been completed to the satisfaction of the Physician Manpower Committee and the report has been submitted to the MSMA Journal with the hope that it will be published in the May issue.

Dr. Miller moved the acceptance of this report with commendation. Motion was seconded by Dr. Bradshaw and carried.—**Referred to Medical Education and Public Welfare Committee.**

REPORTS OF DEANS

■ Dr. Guze stated that he had only one item to report. This item is the apparent change in the policy of the federal government concerning training grants for various categories of trainees in medical schools. He indicated that it looks as though the federal government will eliminate all support for training grants to medical schools, and that federal grants represents 14% of the operating budget of Washington University. He stated that he felt that American medical schools are going to face the worst financial crisis in modern times.

Dr. Miller asked about which categories of trainees would be affected. Dr. Guze stated that all training grants would be affected.

Dr. Allen stated that he would like to ask permission for Dr. Mayer to present a report from the University of Missouri on Saturday.

Dr. Thoma reported that he shared Dr. Guze's concern in reference to training grants. Dr. Thoma stated that Dr. Tom Frawley, Chairman and Professor of Medicine at St. Louis University, had asked to be relieved as Chairman of the Department of Medicine, but would continue as Professor of Medicine. A search committee has been formed to find a replacement. Dr. Thoma reported that a bill had been introduced in the legislature that would affect medical schools in the state. This bill calls for the equalization of tuition in private medical schools to the same level as that at the University of Missouri. This bill would provide enough aid so that any Missouri resident could go to any private school for the same fees and tuition he would pay at the University. This bill includes the two schools of osteopathy.—**Referred to Medical Education and Public Welfare Committee.**

REPORT OF MISSOURI MEDICAL SERVICE

■ Mr. Hughes, President of Missouri Medical Service, stated that about a year ago, he had presented the idea of the development of an open panel health care program. At that time, the Council did endorse and support the development of the concept of the open panel plan. Since that time, work has been done to develop this plan. Mr. Hughes stated that Missouri Medical Service had worked in cooperation with and with the guidance of an ad hoc committee of approximately 30 physicians from the third and fourth Councilor Districts.

Mr. Hughes indicated that the reason so many physicians are interested in this type of plan is that the open panel program offers a comprehensive scope of benefits. He indicated that the open panel plan preserves the fee-for-service concept. He stated that this plan would eliminate, as far as possible, co-pay.

Mr. Hughes stated that he did not know what the financial impact would be. The Board of Trustees had indicated that it would go on risk for a period of one year with this program. Mr. Hughes stated that he would like Council support for this program. Participation of individual physicians is needed and the Board of Trustees feels this is a positive opportunity for medicine and would like MSMA endorsement and support. He said that this program would not replace any programs now being offered by Blue Shield, but would run parallel with them.

Dr. Hetlage asked if this would be sold to individuals or to selected groups. Mr. Hughes stated that this would be offered to groups upwards of 25. Dr. Miller asked what he would anticipate would be essential from the standpoint of enrollment in order to have good exposure. Mr. Hughes stated that they would like to go into groups of more than 25 in which there already was 75% participation in a group and would like to get 50% of that 75% for this to hold up. He stated that he felt this would have appeal for groups of 5, 6, 7 or 8 hundred in the beginning. He indicated that cost to Blue Shield would be administrative and would be in the neighborhood of 10%.

Dr. Hetlage presented a resolution that would endorse and support the open panel health care program. Dr. Cope stated that the Chair felt that since the Council had not had an opportunity to study this in detail, action should be tabled until Saturday morning.

Motion was made, seconded and carried that action on Dr. Hetlage's resolution on the open panel health care program be tabled until Saturday morning.—**Referred to Resolutions Committee.**

REPORT OF THE WOMAN'S AUXILIARY

■ Mrs. Jones stated that the mid-winter Board meeting will be held on Saturday morning. A Public Affairs Breakfast will be held during the Annual Session. This Breakfast will be at 7:45 AM on March 30 and will be co-sponsored by MMPAC and the MSMA Public Affairs Commission. The Speaker for the breakfast will be Dr. James Sammons, a member of the AMA Board of Trustees, who will speak on "Here and Now Politics." Mrs. Jones invited everyone to attend the breakfast.

Mrs. Jones stated that the Auxiliary had been asked to join with the MSMA in the opening session on national legislation that will be held at the Chase Club during the Annual Session. Dr. Hansbrough has been invited to report to the Auxiliary on March 31 on the actions taken during the MSMA Convention.

Mrs. Jones stated that the St. Louis Auxiliary and the Auxiliary Board would be happy to man a joint hospitality booth or room to provide coffee and rolls to physicians during designated hours during the Annual Session.

Mrs. Jones thanked Dr. Bradshaw for writing a sumary of the Health Education Day, and she thanked Mr. Swarens and the MSMA staff for distributing the summary. The summary will be sent to other states who request it and also will be sent to those who attended the Conference.—**Referred to Reports of Officers Committe**

■ Mrs. Jones reported that with the promoting of Jacl son County a new mental health package was being d veloped and a handbook on environmental health woul be published in the near future. She indicated that th Missouri Health Manpower Survey should be complete by May 1. This survey will contain the information of th State Division of Health Survey and, also, informatio from all the schools and churches in the state. When th survey comes out, we will find out in what areas the is a shortage and why there is a lack of personnel an what the Auxiliary can do to help in obtaining medic manpower.

Mrs. Jones stated that she had attended a meeting the American Cancer Society concerning the formatio of a Uterine Cancer Task Force. She stated that sh would like to discuss five points regarding it: (1) A n tionwide effort, sponsored by the American Cancer S ciety, is being made to strongly emphasize the impo tance of the PAP test in the early detection of cervic cancer. (2) Major Goal: PAP test for every woman i the U. S. over the age of 20 by 1976 and tests for thos under 20 at risk. (3) Task Force Concept: Involve an utilize the knowledge, expertise and input of relate groups (medical and dental societies, health agencies to accomplish the goal of the Task Force. (4) State lev task force is to plan, advise and suggest appropriate a tions for the local community task force. (5) Ultimat goal in Missouri is to gain endorsement of appropriat medical groups and institute the actions of the Canc Task Force in every county in Missouri. Mrs. Jones state that the Auxiliary is urging the wives of physicians to s an example by having a PAP test and is urging all phys cians to do PAP tests on appropriate patients.—**Referre to Medical Education and Public Welfare Committee.**

■ Mrs. Jones reported that several Auxiliary membe will attend the Quality of Life Second Congress o March 7-9 in Chicago and that she will attend the AMA AMPAC Public Affairs Workshop in Washington. She a so indicated she would try to attend Dr. Bach's Secon Councilor District meeting and Dr. Cooper's Ninth Cour cilor District meeting.

Mrs. Jones made the following request:

> We would like to request at this time that a positio of Auxiliary Coordinator to the MSMA be create starting April 1, 1973. The purpose of this positio would be to attend the Council Meetings, MSMA Pu lic Affairs Commission, Legislative Committee an Health Manpower committee meetings and the Mi souri State Medical Foundation Annual Meeting or t have the privilege of appointing a representative t attend if she could not do so. This is common in man of our surrounding states, and we have been intereste in this for several years. We believe this would e hance our communications. This coordinator would b appointed by the President of the MSMA with the ad vice of the Auxiliary Medical Advisory Board and th President of the Auxiliary.

It was pointed out that the Council had already e dorsed the goals of the Uterine Cancer Task Force. D Cope stated that exhibits were dropping and that th physicians attending the Annual Session needed a plac to get together and that the cost wouldn't be excessiv The St. Louis Auxiliary had agreed to man the Hospitali ty Booth or Room.

Dr. Hetlage moved that we request the Auxiliary an the St. Louis Auxiliary to proceed with this project. Th motion was seconded and carried.

Dr. Hetlage stated that in regard to the appointment of an Auxiliary coordinator, this had been brought up at the last Council meeting. He stated that we had asked the Auxiliary to become a political force in the state. Over the last few years, they had acquired a new image and deserved to be better informed. Dr. Miller indicated support for Dr. Hetlage's views.

Dr. Chandler moved that an Auxiliary coordinator, as requested by Mrs. Jones, be appointed to serve as indicated. Motion was seconded by Dr. Hansbrough and carried. The Chair indicated that this coordinator would be an officer of the Auxiliary and not of the MSMA.—**Referred to Reports of Officers Committee.**

REMARKS OF THE SPEAKER OF THE HOUSE OF DELEGATES

■ Dr. Imes asked that suggested names of physicians to be appointed to Reference Committees be sent to the MSMA Office and, also, that resolutions be sent to the MSMA Office as soon as possible so they can be included in the Handbook. Dr. Imes then read the following statement adopted by the 1972 House of Delegates regarding the introduction of resolutions:

> "All resolutions to appear in the Handbook must be received at the Association office 45 days prior to the opening session of the House. Any resolution to be introduced after that time must be made available to the House of Delegates 24 hours before the session at which it is to be introduced. At least 200 copies of the resolution or funding for same must be supplied by the individual or society introducing the resolution. At the second session of the House of Delegates the same procedure would be followed, but such introduction would be allowed only if approved by two thirds of the delegates voting. The same procedure would be followed for the third session, but at that time it would take unanimous vote of the House to allow such introduction."

Dr. Imes stated that he felt that the Speaker of the House should be invited to attend all Council meetings throughout the year in order to know what is going on within the Association. Several Councilors expressed the same sentiment as Dr. Imes. Dr. Cope stated that the Speaker would be accorded the same position of the AMA Delegates, which is that of an observer.

Dr. Hetlage moved that the traditional operation of the Council be altered to the extent that the Speaker of the House of Delegates be invited to attend each Council meeting so that he may be even more knowledgeable as to Council activities and opinions in his deliberations as Speaker of the House. Motion was seconded and carried.—**Referred to Report of Officers Committee.**

REPORT OF COMMISSION ON MEDICAL-LEGAL AFFAIRS

■ Mr. Cooper reported that the main item discussed during the joint meeting with the MSMA medical-legal commission and the medical-legal committees of the Osteopathic Association and the Missouri Bar Association was the use of video tape depositions in court. The Committee recommends that the Bar Association Rules Committee, which is presently working on needed changes in court rules, be approached about the possibility that Missouri court rules be changed to permit the use of video tape depositions. These rules would be patterned after the federal rules concerning the use of video tape depositions.

Mr. Cooper reported that this joint committee was being used to handle statewide interprofessional grievances. The committee also discussed House Bill #173, "A bill that would change the present statute of limitations for physician's malpractice from two years from the date of the act to two years from the date of ascertainment and would also remove the dollar limit on wrongful death."

Dr. Bradshaw moved that this report be accepted and filed. Motion was seconded and carried.—**Referred to Constitution and Bylaws Committee.**

REPORT OF LEGAL COUNSEL

■ Mr. Noble reported that the Health Care Foundation suit had been brought to trial on January 15. It took a day and a half to try the case and the Court passed on it rather speedily. The Court found in favor of all defendants on all counts. The judgement does not become effective until after a lapse of 30 days. Mr. Noble stated that a motion to set aside the judgement of the court has been filed by the plaintiffs. This gives them a period of 15 days during which time an affidavit for an appeal can be filed.

Dr. Gunn moved acceptance of this report with thanks. Motion was seconded and carried.—**Referred to Resolutions Committee.**

REPORT OF THE CONSTITUTION AND BYLAWS COMMITTEE

■ The first item considered by the Committee was the constitutional amendment concerning referendums that was accepted by the House of Delegates at the 1972 Annual Session which provides for:

> "Petitions signed by 10% of the active members of the Association, including petitioners representing at least one half of the component medical societies, will initiate a referendum regarding changes in the Constitution or Bylaws or questions before the House of Delegates or Council. A majority vote of all active members of the Association responding shall determine the question."

The Committee felt that this amendment, as written above, gives rights to the minority of the members, but does not protect the majority. The Committee recommends the acceptance of the original reference committee recommendation, which is as follows:

> "Petitions signed by 10% of the active members of the Association, including petitioners representing at least one half of the component medical societies, will initiate a referendum regarding changes in the Constitution or Bylaws or questions before the House of Delegates or Council. *A majority vote of all active members of the Association shall determine the question.*"

or suggests as an alternative recommendation that "*a two-thirds vote of all active members of the Association responding shall determine the question.*"

Considerable discussion followed on how an amendment to the Constitution, which is laying on the table, can be amended in the House of Delegates. Several methods were discussed.

Dr. Franklin moved the acceptance of this portion of the report and recommended that the Council recommend to the House of Delegates the alternative recommendation of the Committee that "a two-thirds vote of all active members of the Association responding shall determine the question." Motion was seconded and carried.

The next item discussed by the Committee was the implementation of Resolution #8—"Representation for Medical Students." The Committee recommends that Article IV of the Constitution be amended by adding the following sentence thereto:

> "Included also in the House of Delegates shall be two student delegates, each from a different class, elected by the student body of each of the medical schools in the State of Missouri, who shall have the same rights and privileges as other delegates."

. . . and a corresponding Bylaws change which would amend Chapter III of the Bylaws by adding the following paragraph to Section 2 and be numbered Section 2A to read as follows:

> "Each of the medical schools in the state of Missouri shall be entitled to send each year two student delegates, each from a different class, elected by the student body of the said medical school. The names of such student delegates shall be certified by the Dean of said medical school to the Secretary of this Association thirty days before the Annual Session. Such student delegates shall have all the rights and privileges of all other delegates."

It was pointed out that if the Constitutional amendment could be adopted on Thursday, the Bylaws change could be brought up for adoption at the second session of the House on Friday. Staff was directed to contact the deans of the medical schools, inform them of the procedures for electing student delegates and request that the elections be held and the names of the student delegates be certified by the deans. If the above amendments are not adopted, the student delegates can still sit in the House as guests.

Dr. Allen stated that there was a problem with the wording as to how the students are elected. He recommended that the Bylaws amendment be amended to delete the words "elected by the student body of the said medical school."

This recommendation was discussed by the Council. The general consensus was to agree with Dr. Allen's recommendation.

Motion was made to accept and endorse this portion of the report of the Committee on Constitution and Bylaws with the recommendation to delete "elected by the student body of the said medical school" in the Bylaws. Motion was seconded and carried.

The next item discussed by the Committee was Resolution #27, "Definition of Council Chairmanship." This resolution had been referred to both the Planning and Constitution and Bylaws Committee. The Planning Committee recommended to the Council that this be implemented, but after study, it was pointed out that the resolution would be difficult to fully implement. The Council re-referred this back to the Planning Committee for further study with the Planning Committee tabling the matter and the Council accepting that action. Therefore, this Committee took no action on the issue.

The last item discussed was the Council status of the Immediate Past-President. The Planning Committee requested an opinion from legal counsel on this matter. Legal Counsel's opinion is as follows: "The Immediate Past-President is a member of the Council by virtue of the Constitution. He is not an Officer or a Councilor, but is on the Council in an advisory capacity for continuity."

Dr. Franklin moved the acceptance of the last two portions of the report. Motion was seconded and carried.

Dr. Franklin moved the acceptance of the entire report with the recommended amendment. Motion was seconded and carried.

Dr. Cope, Chairman of the Council, stated that the material in this report would be submitted to the House of Delegates in three portions for easier handling on the floor of the House.—**Referred to Constitution and Bylaws Committee.**

■ Dr. Matthews stated that a subcommittee of the Executive Committee had been appointed to study MSMA Personnel Policies. This Committee consists of Drs. Franklin, Stricker and Matthews. Dr. Matthews then read a proposed statement from the Committee:

MSMA POLICY FOR EMPLOYEE WHO BECOMES DISABLED

It will be a policy of the MSMA to provide the following salary benefits to employees who become disabled:

1. Employee less than five years continuous service: No benefits
2. Employee of more than five and less than ten years continuous service: Salary will be paid for three months
3. Employee of more than ten years continuous service: Salary will be paid for a period of six months.

All employees are eligible to participate in the pension plan after the age of 30 and after three years continuous service. Disability benefits in this plan provide for a monthly disability benefit after an employee has been disabled for a period in excess of six months.

Dr. Gunn moved acceptance of this policy. Dr. Stricker seconded the motion and the motion was carried.

Mr. Lee Mortenson of the AMA stated that he would like to discuss a few items. He stated that at the last meeting of the Council, an ad hoc committee on membership had been appointed and that a meeting would be held on February 23 in the MSMA Office in Jefferson City. He indicated that the AMA was involved in a membership project in the St. Louis area.

Mr. Mortenson mentioned vehicles of communications that are being used by surrounding states, and said the topic of communications would be taken up at the National Leadership Conference.—**Referred to Reports of Officers Committee.**

■ Mr. Mortenson stated that he would like to make a suggestion in regard to the proposed Constitution and Bylaws presented by Dr. Peterson. He stated that he would like the AMA legal staff to look at the Constitution and Bylaws and possibly make some suggestions.

Dr. Gunn moved that the above suggestion be carried out. Motion was seconded and carried.—**Referred to Resolutions Committee.**

■ Mr. Mortenson mentioned that a National Leadership Conference will be held on February 16-18 and it promises to be a good Conference. He also mentioned that an AMA-AMPAC Public Affairs Workshop will be held in Washington in March.

Mr. Mortenson reported that Mr. Gary Schnedler of Greene County had contacted him in regard to a group, Crusade for Life, which is soliticing funds for dialysis machines, and asked for information about this group. Dr. Allen pointed out that the state of Missouri has been appropriating money for those who need home or hospital dialysis and that there is no need for this type of operation.

Mr. Mortenson stated that the AMA is becoming more and more interested in state legislation and expects some shift of emphasis to state legislation.—**Referred to Miscellaneous Affairs Committee.**

REPORT OF DEANS

■ Dr. Noback reported that 360 applications had been received for next fall at the Missouri University Medical

School in Kansas City. He stated that acceptances would go out later this month.

Dr. Noback reported that the Area Health Education Center in Kansas City is now beginning to come into activation. He indicated that, initially, the program would be in the Kansas City area and later would work with the counties in the western part of the state. The plan for the first year is to get students out into the western part of the state and develop communitywide residencies to expand continuing education activities. The Area Health Education Center will work with hospitals, county societies and specialty groups in the western part of the state.

Dr. Noback reported that a quality control program is being developed within the medical school itself. He indicated that physicians had been asked to identify the kinds of questions relative to the roles of physicians.

Dr. Noback indicated that the Kansas City Medical School is again going to have family practice preceptorships during the summer for year 2 students. The number will increase from 18 last summer to 40 this summer.

Dr. Noback stated that nine students were expected to graduate this spring. So far, five of those students have been slotted in their initial house officer experience at General Hospital in Kansas City.

Mr. McIntyre asked Dr. Noback how many students they would take into the first year from the applicants. Dr. Noback stated the school would bring in somewhere between 72 and 80 students. He also stated that they were waiting to hear from the Liaison Committee on Education in regard to full approval for the medical school.

Dr. Mayer reported that over the last 20 months, he had chaired a committee of the National Board of Medical Examiners that had studied licensure, accreditation, certification and evaluation of the medical profession in this country as they relate to U. S. and foreign medical graduates. The Committee is rapidly approaching the issuance of a formal report. He stated some of the real concerns in this country have been the foreign medical graduate issue and the issue of evaluation of the medical profession as it relates to recertification and relicensure. He stated that 50% of the certification in this country is done by Specialty Boards. Dr. Mayer indicated that the Committee probably would recommend that a "qualifying" examination be given in the last year of medical school. This examination would provide for the State Board to license an individual to practice in a supervised setting. Full licensure would come following certification by his Specialty Board. Foreign medical graduates also will probably be required to take the same examination that U. S. graduates take. He stated that what will happen in regard to recertification is unclear at this point. He indicated that seven Specialty Boards were considering this matter.

Dr. Hetlage asked if the Committee was proposing that no one would receive full licensure until certification by a Specialty Board. Dr. Mayer stated that within the next five years, the vast majority of U. S. graduates would be licensed by this method. He stated that he thought that the Committee would propose that an individual who had passed the qualifying examination would not receive full licensure to practice until (1) he is certified by a specialty board and (2) he has had a minimum of two and, hopefully, three years of graduate training in an AMA-approved training program. The basis behind this change is that an M.D. degree in this country no longer prepares an individual to practice medicine.

A question was asked about how recertification will be done. He indicated that he didn't have any idea, but the Committee felt that examinations per se were not the appropriate way to go about recertification. He said that,

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perhaps, this could be done on a regional peer review audit basis.

Dr. Mayer stated that at a subsequent meeting of the Council, he would appreciate an opportunity to present the Committee's report in detail. Dr. Cope stated that when the formal report is ready, a special arrangement will be made to place this on the agenda.—**Referred to Medical Education and Public Welfare Committee.**

■ A resolution presented during a report given by Mr. James Hughes, President of Missouri Medical Service, regarding their Open Panel Health Care Program was tabled on Friday until the Council had a chance to look over the program presented by Mr. Hughes.

On Saturday, Dr. Hetlage moved the following:

> Whereas, St. Louis Blue Shield (Missouri Medical Service) has developed the Open Panel Health Care Program with the consultation and advice of the medical profession; and
>
> Whereas, This Open Panel Health Care Program is designed to meet a public desire for a fully comprehensive health program for medical and surgical services and this Open Panel Health Care Program is deemed to be in the best interest of and for the benefit of the patients of physicians and the members of Blue Shield who desire to participate in this Program and thereby also for the benefit of the general public; and
>
> Whereas, This Open Panel Health Care Program reflects the suggestions and advice of the medical profession and is presented to physicians as an important comprehensive program for their support and participation; now therefore, it is hereby
>
> *Resolved*, That the Council of Missouri State Medical Association fully endorses and approves the Blue Shield Open Panel Health Care Program and urges physicians to support and participate in it.

The motion was seconded by Dr. Miller and carried.—**Referred to Resolutions Committee.**

REPORT OF SPECIAL COMMITTEE TO STUDY FEASIBILITY OF ADDITIONAL TRAINING OF PHYSICIANS IN PRIMARY PATIENT CARE IN MISSOURI

■ Dr. Bradshaw stated that the Committee considered several points and would like to present them at this time as information only. The Committee intends to continue work in this area. The points mentioned above are as follows:

1. Either medical manpower shortage or the maldistribution of medical manpower might be partially relieved by additional training in primary patient care.
2. Additional training could be advantageous for the further continuation in the specialty and sub-specialty type of practice.
3. The program could lead to better understanding of the internal problems with our present system of medical care.
4. Impressionable young people entering the profession would have greater opportunity to evaluate their own performance.
5. May be used as an economic aid for young men to further their educational pursuits at a time when economic assistance is usually needed.
6. A minimum of one year in Primary Care Practice would best be accomplished in a preceptorship situation with a salary based on economic competition. (Definitely not "Slave Labor.")
7. Such a program of Primary Care experience could and should relieve much of the burden presently existing in many areas of the United States as well as add to the basic premise that the medical professional should be a broadly educated individual.
8. Local Missouri State requirement is probably a stumbling block . . . should be expanded to AMA jurisdiction.
9. Define: Primary Patient Care!!!! What guidelines should be outlined for control? What areas of medicine are acceptable for this type of training?

Dr. Bradshaw indicated that the above thoughts are offered as a springboard for discussion.

Dr. Cope stated that this was in order on the terms for information only.—**Referred to Medical Education and Public Welfare Committee.**

REPORT OF FINANCE COMMITTEE

■ Dr. Gunn reported that the Finance Committee had met on February 2 and had discussed procedures for the Building Committee in handling loan and payments to the contractor and architect. The Committee needs official Council approval for officers of the Association to establish loan and bank accounts and to authorize the same three signatures to sign checks and notes as sign checks on the regular account. The Committee also discussed the performance of the investment account. The bank officer of our investment account will attend the Finance Committee meeting that will be held during the Annual Session and make specific investment recommendations at that time.

Dr. McAlhany moved approval of the bank signature resolutions for Missouri State Medical Association Building Construction loan and checking accounts with Mercantile Trust Company of St. Louis. Motion was seconded by Dr. Hansbrough and carried.—**Referred to Reports of Officers Committee.**

REPORT OF LEGISLATIVE COMMITTEE

■ Dr. Matthews presented a list of bills of interest to medicine that had been discussed by the Legislative Committee. The Legislative Committee indicated support for several bills. The Council approved of this action. There were several bills presented that the Legislative Committee felt that MSMA should oppose. The Council approved this action. Dr. Matthews also presented several bills for informational purposes only and indicated that no position would be taken on them. The Council approved this action.

Dr. Matthews asked for Council approval to draw up and introduce "sick doctor" legislation in this Session of the General Assembly. He indicated that this would be similar to the legislation now being used in Florida. He stated that the AMA had taken the stand encouraging states to get busy in this area.

Motion was made, seconded and carried that "sick doctor" legislation be drawn up and introduced into the General Assembly. Motion was made and seconded to approved the entire report. Motion carried.—**Referred to Miscellaneous Affairs Committee.**

■ Dr. Matthews reported that the new building is progressing nicely. He stated that approximately $90,000 will be needed for the renovation work and approximately $20,000 for the furnishing of the building. He stated that he thought the building would be completed some time this spring.

Dr. Hetlage stated that most of the members don't know too much about the new building and that perhaps some sort of progress article could appear in the Journal. It was pointed out that the Historical Society is writing a history of the building and that this could be published in the Journal.—**Referred to Reports of Officers Committee.**

■ Doctor Chandler asked about the status of the doctor-for-a-day program for the General Assembly. Mr. Cooper stated this is being sponsored by the Missouri Academy of Family Physicians and that the MSMA had offered any assistance that might be needed. He stated that a small room in the Capitol had been located and which the physician could use as an office. Mr. Cooper stated that Dr. Revare from Clay County had mailed letters requesting physicians to serve as doctor for a day. This program would run on Tuesday, Wednesday and Thursday from April to June.

The next meeting of the Council will be held on March 28 at 6 PM in the Chase-Park Plaza Hotel in St. Louis immediately preceding the Annual Session

Mr. Swarens announced that the Public Affairs Conference would start at 2 PM at the Ramada Inn. He stated that Mr. Howard Cook of the AMA Office in Washington will be the speaker at the banquet.

The Council adjourned at 1:30 AM.—**Referred to Miscellaneous Affairs Committee.**

Supplementary Council Report

Dr. Cope then presented a supplementary report on the Council Meeting held on Wednesday, March 28 in the Chase-Park Plaza Hotel in St. Louis. He reported as follows:

"The Council of the Missouri State Medical Association met on March 28, 1973 in the Chase-Park Plaza Hotel in St. Louis. The first item of business was the approval of the Minutes of the last meeting on February 2 and 3. It was moved and seconded that the Minutes be approved as published. The motion carried.

"The second item on the agenda was the President's Report. Dr. Gunn announced that students representing the Student AMA were to be given $500 to assist them as delegates to that meeting. The President described in detail much of the correspondence he receives in his role as President.

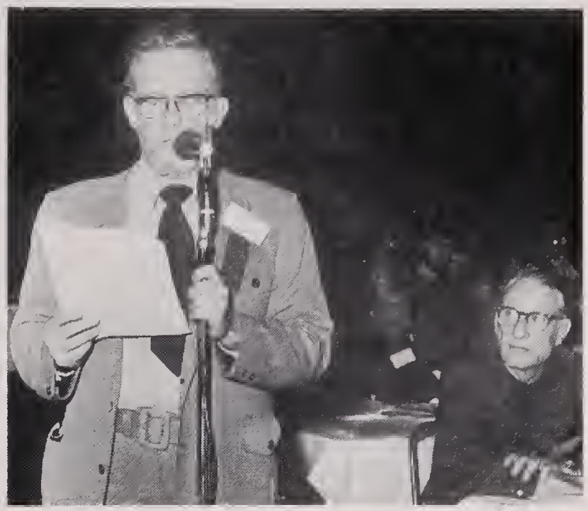
(The Speaker referred this portion of the report to the Reference Committee on Reports of Officers.)

"The third item of business was the Secretary's folder. A letter from Dr. Klear of the American Physiologic Association requested that the Missouri State Medical Association request that the Postmaster General issue a commemorative stamp for Dr. Beaumont of St. Louis, who studied gastric digestion. This motion was passed.

"Next, it was stated that the green sheet from the AMA had been placed on the bulletin boards of 170 hospitals in the state. It was requested by staff that this be continued until the next Council meeting before an evaluation is made. It was moved and seconded that mailing the green sheet be continued and that the program be expanded with additional information about state activities. The motion carried.

(The Speaker referred this portion of the report to the Reference Committee on Reports of Officers.)

"At this time, Mr. McIntyre asked Mr. Swarens to report on the VD Workshops. Nineteen Workshops have been held, and 15 were staffed by the MSMA. A summary of the entire program is being prepared for presentation. It also is felt that the same type of presentation can be used in other areas of health education.



As Chairman of the MSMA Council, Dr. James C. Cope, Columbia, presented the Supplementary Council Report. Dr. Victor B. Buhler of Kansas City, a Past-President of the MSMA, is seated at the right.

(The Speaker referred this portion of the report to the Committee on Miscellaneous Affairs.)

"Mr. McIntyre reported on the AMA-AMPAC Workshop held in Washington. This AMA meeting presents members of the MSMA with an opportunity to get together with elected representatives at a luncheon meeting in Washington. Representatives Taylor, Ichord and Randall are all sponsors of the Medicredit Bill.

(The Speaker referred this portion of the report to the Committee on Miscellaneous Affairs.)

"Mr. Noble reported that at the time the Pension Fund for MSMA employees was started, certain provisions applied only to male employees. Since the beginning of Civil Rights and equal opportunities, however, this is no longer permissible. The motion that sexual discrimination be removed was made, seconded and adopted.

(The Speaker referred this portion of the report to the Reference Committee on Reports of Officers.)

"Mr. Chairman, at this time, I would like for the House to suspend the order of business so that I can introduce and the House can vote upon a noncontroversial courtesy resolution.

(With the permission of the House, the Speaker suspended the rules.)

Resolution Honoring Mrs. Bertha A. Thomas

Whereas, Bertha A. Thomas is retiring from her position as Office Manager effective April 1, 1973, following 30 years of dedicated service as an employee of the Missouri State Medical Association; and

Whereas, She has earned the respect and friendship of the many members and others with whom she has come into contact by her sincere and energetic service to the Association; and

Whereas, Her effectiveness and competence as office manager has helped guide the Association to a position of high standing among physicians and the public; and

Whereas, Her wisdom, friendliness and personal character will be sorely missed by all those persons who come into contact with the MSMA staff; be it therefore

Resolved, By the House of Delegates of the Missouri State Medical Association sitting at its 115th Annual Session in St. Louis, Missouri, that Bert be formally commended and accorded the highest praise for devoted service to the doctors of Missouri; and be it further

Resolved, That the House express to her on behalf of the entire membership, the esteem and affection in which she is held by the doctors of the state; and be it further

Resolved, That the House extend to her the good wishes of the profession for health and happiness in the years to come.

"I move the adoption of this resolution.

(The resolution was adopted by the House of Delegates by acclamation. The Speaker reinstated the rules.)

"Mr. McIntyre asked permission to purchase a suitable gift for Mrs. Thomas to present to her in due course, with a copy of the resolution. The motion was seconded and adopted.

"Mr. Noble reported on the law suit concerning the Health Care Foundation and said that the Circuit Court of St. Louis County gave the MSMA a full and complete decision in establishing the Health Care Foundation. This decision has been appealed to the St. Louis Court of Appeals. Legal counsel indicated that there is really no basis for a new trial, and the Health Care Foundation should proceed with operation as though there is no case pending because they received a favorable decision.

(The Speaker referred this portion of the report to the Reference Committee on Resolutions.)

"Dr. Matthews stated that there are about 70 bills which need to be kept under observation. This is a tremendous task for the staff, which has been working from breakfast meetings on into late hearings distributing information. Yearly sessions of the State Legislature have aggravated this problem. The Chairman requested that we give the staff all the help, encouragement and moral support that we can.

(The Speaker referred this portion of the report to the Reference Committee on Miscellaneous Affairs.)

"Dr. Young, Chairman of the Ad Hoc Committee on Continuing Medical Education, gave a progress report on the development of a statewide program for continuing medical education. This program was discussed in some detail. The entire matter of continuing medical education is under study. There are many ramifications of the CME and PSRO activities. The Council moved to receive this report, and the entire matter will receive further study by the full Commission on Medical Education and Health Manpower. Dr. Young was given a vote of confidence concerning the conceptual framework of the committee's proposal on Continuing Medical Education.

"Dr. Young was requested to attend the hearing on Resolution #10, which is before the House.

(The Speaker referred this portion of the report to the Reference Committee on Medical Education and Public Welfare.)

"Dr. George Ladyman stated that information on the Quality Assurance Program (QAP) proposed by the American Hospital Association probably has not been available long enough for a real evaluation. This is a comprehensive, inclusive program to insure the quality of medical care throughout the United States. This program revolves centrally around the hospital. The basic objection is that medicine would be controlled by the hospital rather than by the individual physician. The motion was made and seconded that Dr. Ladyman continue his observation of the QAP Program and attend a May meeting, at which this will be considered. The motion was passed.

(The Speaker referred this portion of the report to the Reference Committee on Miscellaneous Affairs.)

"Dr. Joseph V. Finnegan, Editor, recommended reappointment of members of the present Publication Committee and Editorial Board. This was approved. The motion was made, seconded and approved that Dr. Finnegan be commended for his efforts.

"Dr. Matthews reported for the Building Committee. We will soon be in our new building. Mr. McIntyre indicated that the building will be finished in approximately two weeks. The new address is 113 Madison Street. The cost of the new building, furnishings and decorations are running close to original estimates.

"Lee Mortinson of the AMA gave a report of the Membership Study Committee. Following Mr. Mortinson's presentation, the Council decided to appoint a permanent Council Committee on Membership. This committee is to be appointed by the next Chairman of the Council.

(The Speaker referred this portion of the report to the Reference Committee on Reports of Officers.)

"Dr. Benoit then gave an information report on the Health Care Foundation. He explained the implications of the proposed changes in the Bylaws of the Health Care Foundation. These changes greatly broaden the base of the Foundation, including many lay and medical ancillary people. The Board of Directors of the HFC feels that these changes will align the Health Care Foundation with the anticipated regulations for PSRO. Dr. Benoit presented the following resolution:

That the Council of Missouri State Medical Association recommends to the House of Delegates of MSMA that endorsement be given to the Health Care Foundation of Missouri in its efforts to become the responsible agency for PSRO activities in Missouri.

"This resolution was adopted by the Council.

(The Speaker referred this portion of the report to the Reference Committee on Resolutions.)

"In Executive Session, the Council passed the following motion:

As a general rule, the Council of the Missouri State Medical Association opposes the granting of a license to practice medicine to any physician who has been convicted of a felony.

(The Speaker referred this portion of the report to the Reference Committee on Miscellaneous Affairs.)

"Mr. Speaker, this concludes the supplementary report of the Council."

(On motion, duly seconded, the supplementary report of the Council was accepted.)

At this time, the Speaker again suspended the rules to hear a motion from Dr. Hugh Stephenson, as follows:

"Mr. Speaker, the Boone County Medical Society wishes to introduce the following resolution:

Resolution Honoring Dr. M. Pinson Neal

Whereas, This is the first Annual Session of the Missouri State Medical Association in over 50 years that has not been attended by Dr. M. Pinson Neal, Emeritus Professor of Pathology at the University of Missouri, Columbia, and

Whereas, Dr. Neal is now recuperating from a fractured hip (incurred while in his office at the University of Missouri School of Medicine) and is presently making an excellent recovery, and

Whereas, Dr. Neal has served the Missouri State Medical Association in a great variety of ways during this last half century, has been an effective and dedicated teacher and friend to many generations of medical students, and

Whereas, Dr. Neal has been a longtime leader in his profession, Past President of the Southern Medical Association and was member of this House of Delegates for many, many years, and

Whereas, Dr. Neal is respected and loved by all the members of this Association, and

Whereas, Dr. Neal's son, Dr. M. Pinson Neal, Jr., has this month been named Provost of the University of Virginia Commonwealth University, therefore, be it

Resolved, That the House of Delegates of the Missouri State Medical Association express to Dr. Neal their sincere congratulations on the accomplishments of Dr. M. Pinson Neal, Jr., and, also, of their heartfelt wishes for a most speedy recovery and a return to the 116th Annual Session of the Missouri State Medical Association in Kansas City, Missouri, April, 1974, and

Further Resolved, That a copy of this Resolution be sent to Dr. M. Pinson Neal at his present address of the Candle Light Lodge in Columbia, Missouri.

(After the motion, which was seconded, the House of Delegates voted to adopt the resolution by acclamation.)

NOMINATING COMMITTEE

Dr. Gunn named the following members to the Committee on Nominations: Drs. Chris Fotopoulos, Philip Foreman, Donald Judd (Chairman), Allen Klippel, Ben Jolly, Charles Lederer, Walter Stelmach, William M. Walker, B. J. Bass, and Melvin Kasten.

Unfinished Business

The Speaker invited consideration of unfinished business.

Dr. Robert H. Felix moved that the proposed amendment to Article IV of the Constitution, which was tabled at the 1972 Annual Session, be taken from the table and passed. The resolution refers to Student Delegates.

Resolution—Representation for Medical Students

Whereas, The MSMA encourages the active participation of medical students in the affairs of the organizations of the medical profession; and

Whereas, The MSMA has made available to medical students Associate membership in the MSMA and its component local medical societies; and

Whereas, The MSMA believes that the majority voice of medical students should be heard and considered formally by the MSMA; therefore, be it

Resolved, That the MSMA shall make available in its House of Delegates seats for duly elected representatives of each school of medicine in the State of Missouri, and be it further

Resolved, That the Deans of the Medical Schools be requested to cause to be elected from the body of each of their institutions, two student Delegates to the MSMA, each student to be from a different class; and be it finally

Resolved, That the student Delegates shall be seated in the House of Delegates as full voting members of the House with all of the rights and privileges pertaining thereto.

(The motion was seconded. After a discussion and a stand-up vote, a Delegate requested a roll call vote, which was taken by the Secretary. The motion was approved by a vote of 110 to 54.)

The Speaker next asked the Delegates to consider the proposed amendment to Article IX of the Constitution concerning a referendum, which had been lying on the table from the 114th Annual Session of the MSMA in 1972.

(The Speaker referred to the Report of the Committee on Constitution and Bylaws (see page 412) in which the Committee recommends that the Constitutional amendment accepted by the House during the 1972 session not be adopted.)

The Committee further recommends the following Constitutional amendment:

> Petitions signed by 10% of the active members of the Association, including petitioners representing at least one half of the component medical societies, will initiate a referendum regarding changes in the Constitution and Bylaws or questions before the House of Delegates or Council. A majority vote of all active members of the Association shall determine the question.

The Committee also suggests an alternative recommendation to the last sentence in the above recommendation as follows:

> A two-thirds vote of all active members of the Association responding shall determine the question.

After discussion, Dr. Kenneth Hollweg moved that the following Constitutional amendment be adopted:

> Petition signed by 10% of the active members of the Association, including petitioners representing at least one half of the component Medical Societies, will initiate a referendum regarding changes in the Constitution or Bylaws or questions before the House of Delegates. A two-thirds vote of all active members of the Association responding will determine the question.

(Dr. Hollweg's motion was seconded and approved.)

The Speaker stated that this proposed amendment to the Constitution would be tabled for one year and would be voted on at the 116th Annual Session (1974).)

Dr. Felix moved that Chapter 3 of the MSMA Bylaws be amended by adding the following paragraph to Section 2 to be numbered Section 2-A:

> Each of the medical schools in the State of Missouri shall be entitled to send each year two student delegates, each from a different class, elected by the student body of the said medical school. The names of such student delegates shall be certified by the dean of said medical school to the Secretary of this Association, thirty days before the Annual Session. Such student delegates shall have all the rights and privileges of all other delegates.

(The Speaker referred this motion to the Reference Committee on Constitution and Bylaws and stated that it would be tabled for 24 hours and then be considered at the Second Session of the House of Delegates.)

Introduction of New Business

The Speaker invited the introduction of new business.

The Speaker noted that since Resolutions #1 through #14 had been submitted to the Council and were included in the Delegates Handbook, their introduction from the floor was not required. These resolutions are as follows:

Resolution #1—Emergency Medical Service

(Introduced by MSMA Ad Hoc Committee on Emergency Medical Services and St. Louis County Medical Society)

Whereas, There has been much talk about the weakness of Emergency Medical Service in our state; and

Whereas, The talk has produced only a little action by our state and local governments; and

Whereas, The carnage on our highways continues; and

Whereas, Missouri ranks rather poorly in any programs to benefit those of our citizens who are acutely ill or injured; now, therefore, be it

Resolved, That the President of the MSMA appoint an Ad Hoc Committee of this Association which will work with other organizations interested in these problems and which will prepare a detailed description for all aspects of a statewide Emergency Medical Service System; and, be it further

Resolved, That this plan should be developed to serve as a guide for a grant application for launching of such a system as has been done in Illinois and other states and regions.

(Referred to Reference Committee on Miscellaneous Affairs.)

Resolution #2—Special Committee to Study Ways and Means to Deal with the General Trend of Legislated Medical Care

(Introduced by Clay County Medical Society)

Whereas, The care of the sick and injured depends on the presence of medical expertise; and

Whereas, The members of the State Medical Association have that appropriate expertise; and

Whereas, The general trend of medical care is gradually being steered by certain uninformed members of the legislative and other political subdivisions of these United States; and

Whereas, Political considerations with respect to medical care have not been shown to be in the best interest of the patient; and

Whereas, The medical profession should have final authority for the medical care of the nation, due to its expertise; now, therefore, be it

Resolved, That the MSMA at great haste form a committee for the expedient study of ways and means to deal with the general trend of legislated medical care, present or future, by forming appropriate political groups and guild organizations.

(Referred to Reference Committee on Resolutions.)

Resolution #3—Rubella Immunization Requirements for Marriage License

(Introduced by Melvin M. Schwartz, M.D., Delegate, St. Louis County Medical Society)

Whereas, Rubella during pregnancy can be disastrous to the unborn infant; and

Whereas, A rubella titre for the identification of rubella antibodies in the blood is now inexpensively available; and

Whereas, Rubella vaccine also is available for immunization; now, therefore be it

Resolved, That the MSMA urges that in order to qualify for a marriage license in the state of Missouri, a rubella titre on the female be made mandatory; and be it further

Resolved, That if such a test be negative for rubella antibodies, rubella vaccination be made mandatory before a marriage license can be issued unless she be pregnant at the time; and be it further

Resolved, That copies of this resolution be sent to such Senators and/or Representatives of the General Assembly of the State of Missouri who the MSMA feel would introduce such legislation in their respective legislative bodies.

(Referred to Reference Committee on Miscellaneous Affairs.)

Resolution #4—Revision of Federal Narcotics Law

(Introduced by Melvin M. Schwartz, M.D., Delegate, St. Louis County Medical Society)

Whereas, Crime is rampant in the United States; and

Whereas, Illegal narcotics—smuggling and distribution—is a major portion of crime; and

Whereas, Narcotics, therefore, become very expensive to the illegal narcotics user; and

Whereas, Narcotic addicts will steal, rob, burglarize, mug and even murder to maintain their expensive habit; and

Whereas, It has been established in other countries that this type of crime can be reduced by changing the narcotics laws so that narcotics can be distributed cheaply; now, therefore, be it

Resolved, That the MSMA is in favor of revision of the Federal narcotics laws in such manner whereby clinics can be set up for the purpose of dispensing narcotics legally to narcotics addicts or, if this is not feasible in some areas, that individual physicians may be allowed to do the same in order to eliminate the necessity for criminal acts to maintain the now expensive narcotic habit; and be it further

Resolved, That the MSMA instruct its delegates to the AMA to carry this resolution to the next AMA meeting and introduce it there; and be it further

Resolved, That copies of this resolution be sent to the United States Senators and United States Representatives from the great state of Missouri in order to advise them of our feelings in this matter and, hopefully, to persuade one or all of them to introduce the proper legislation to change the narcotic laws.

(Referred to Reference Committee on Miscellaneous Affairs.)

Resolution #5—Endorsement of "Medicredit" Legislation

(Introduced by Hubert A. Ritter, M.D., Delegate, St. Louis Medical Society)

Whereas, The citizens of our country look to physicians to provide knowledgeable information regarding health care; and

Whereas, The American Medical Association is the voice of working physicians; and

Whereas, The American Medical Association through its "Medicredit Bill"—HR 2222 and S 444—has sought to increase health care access without increasing cost while maintaining the quality, which has become the hallmark of American medicine; therefore, be it

Resolved, That the Missouri State Medical Association, convened at St. Louis, Missouri, March 29, 1973, go on record as endorsing Senate Bill 444 and House Resolution 2222; and be it further

Resolved, That a copy of this resolution be forwarded to the Trustees of the American Medical Association.

(Referred to Reference Committee on Miscellaneous Affairs.)

Resolution #6—Dues for Physicians in House Staff Training Programs

(Introduced by Richard V. Bradley, M.D., Delegate, St. Louis Medical Society)

Whereas, The ultimate purpose of the Missouri State Medical Association is to be representative of the physicians within its entire domain; and

Whereas, A number of those physicians within the domain are actively employed in a progressive house staff training program; and

Whereas, The physicians actively engaged in progressive house staff training are in a period of relatively limited financial means; and

Whereas, The representation of those physicians actively engaged in progressive house staff training should be on a full-fledged active membership basis rather than anything less; now, therefore, be it

Resolved, That the Missouri State Medical Association alter its Constitution and Bylaws where necessary in order to offer to any physician actively employed in the progressive house staff training program full membership at a cost of $20 per annum.

(Referred to Reference Committee on Constitution and Bylaws.)

Resolution #7—Repeal of Missouri Controlled Substance Law

(Introduced by George L. Hawkins, M.D., Delegate, St. Louis Medical Society)

Whereas, The state of Missouri has passed a law creating licensure of physicians to prescribe drugs; and

Whereas, Federal legislation already is in existence superseding this law in Missouri; and

Whereas, The only function of this law in Missouri is to collect a fee from physicians; now, therefore, be it

Resolved, That the MSMA make every effort to have this law, creating a useless bureau in Missouri, repealed.

(Referred to Reference Committee on Miscellaneous Affairs.)

Resolution #8—Recent Decision of U. S. Supreme Court on Abortion

(Introduced by Charles A. Jost, M.D., Delegate, St. Louis Medical Society)

Whereas, The preservation of human life is an objective of this Association; and

Whereas, Abortion is the destruction of human life; and

Whereas, The recent decision of the Supreme Court tends to make abortion more widespread; now, therefore, be it

Resolved, That the House of Delegates of the MSMA petition all the Missouri members of the Congress to remove from the jurisdiction of the Supreme Court all matters pertaining to abortion; and be it further

Resolved, That copies of this petition be sent to the members of the Congress of the United States and to the President of the United States of America.

(Referred to Reference Committee on Miscellaneous Affairs.)

Resolution #9—Health and Hospital Insurance for Newborn

(Introduced by Francis X. Lieb, M.D., Delegate, St. Louis Medical Society)

Whereas, To be deprived of the right to be covered by insurance on the same basis as the rest of the population is a violation of the civil rights of an individual and must be considered as discrimination; and

Whereas, The newborn has been discriminated against in health and hospital insurance plans by requiring a waiting period after birth before they are covered as dependents; and

Whereas, It is essential that legislation eliminating such disrimination be adopted; now, therefore, be it

Resolved, That the Missouri State Medical Association urges passage of legislation that recognizes the rights of this group from he moment of conception and that provides for insurance coverge including medical, surgical and hospitalization care on the same basis as any other dependent covered by the policy. Coverge shall include hospital costs, laboratory costs, drug costs, including oxygen, the costs of specialized equipment such as incubators and monitoring devices, special nursing services and costs f transporting the child to a proper center; and be it further

Resolved, That any comprehensive health insurance policy, hospitalization, medical, surgical or accident policy issued for use in he state of Missouri shall provide for such coverage whether isued to an individual or to a group and no restrictions, limitations, waivers, amendments or other disclaimers of such coverage shall be permitted.

(Referred to Reference Committee on Miscellaneous Affairs.)

Resolution #10—Required Continued Medical Education

(Introduced by Jasper County Medical Society)

Whereas, The need for continued medical education of physicians for the benefit of the people of Missouri is acknowledged by all, and since we as physicians are committed to the highest standards in the practice of medicine, we reaffirm our commitment to continued education, and

Whereas, The American Medical Association and other states have already established guidelines of 150 hours of continued education every three years on a voluntary basis through the Physician's Recognition Award, and

Whereas, We as physicians of the state of Missouri have always aken the lead in promoting and advancing good medical care for he people of Missouri and desire to insure this continued quality of care without governmental control; therefore, be it

Resolved, That the Missouri State Medical Association recommend to the Missouri Board of Healing Arts that the Board, by administrative action, require 150 hours of continued education every hree years, similar to the guidelines set by the American Medical Association as a prerequisite to continued licensure in this State.

(Referred to Reference Committee on Medical Education and Public Welfare.)

Resolution #11—Continuing Medical Education

(Introduced by Kenneth Bruns, M.D., Delegate
St. Louis Medical Society)

Whereas, The stated purpose of the MSMA to encourage the best possible medical care for the citizens of the State of Missouri s furthered by participation in continuing medical education by he members of this Society, and

Whereas, It is a conviction of the House of Delegates of MSMA that our membership is composed of intelligent, mature, professional men capable of and regularly practicing self-discipline, and

Whereas, Such individuals are not in need of other physicians determining their needs of discipline meted out by self-appointed judges of propriety and complicity with some as yet indeterminate norms, therefore, be it

Resolved, That the Committee on Continuing Medical Education be instructed to encourage participation in educational programs by the use of positive actions, such as public recognition and the awarding of such mementos as certificates and plaques as they determine to be desirable and feasible, and be it further

Resolved, That no level of participation shall be used to initiate disciplinary action against any member without the explicit instructions of this House of Delegates of the MSMA.

(Referred to Reference Committee on Medical Education and Public Welfare.)

Resolution #12—Continuing Medical Education

(Introduced by Kenneth Bruns, M.D., Delegate,
St. Louis Medical Society)

Whereas, The promotion, organization and operation of the Committee on Continuing Medical Education should be a positive force within and for our Missouri State Medical Association, and

Whereas, There are now and will be in the future negative forces tempting to single out individual members, both from within (the Committee on Medical Ethics, Grievance Committees, etc.) and from without (PSRO, the Health Care Foundation of Missouri, etc.), now, therefore, be it

Resolved, That the Committee on Continuing Medical Education be instructed to direct its efforts to the improvement of education among the members of the MSMA but that their efforts not single out a specific physician for education in any specified field or portion of medical knowledge.

(Referred to Reference Committee on Medical Education and Public Welfare.)

Resolution #13—Constitutional Amendment on Speaker's Qualifications

(Introduced by Northwest Missouri County Medical Society)

Whereas, The Speaker and Vice-Speaker are elected by the House of Delegates at the Annual Session each spring to serve in those offices for the forthcoming Session, and

Whereas, The Delegates to the House of Delegates are not elected by component societies until the fall months preceding each Annual Session, and

Whereas, It would be conceivable that the Speaker or Vice-Speaker of the forthcoming Annual Session would not be elected a Delegate by his component society, and

Whereas, The Constitution of the Missouri State Medical Association stipulates that the Speaker and Vice-Speaker must be elected from the body of the House of Delegates, be it, therefore,

Resolved, That in order to relieve this possible conflicting situation, the Constitution of the Missouri State Medical Association be amended to provide that the Speaker and Vice-Speaker when elected are automatically Delegates-at-large in the House of Delegates for the duration of their respective terms of office.

(Referred to Reference Committee on Constitution and Bylaws.)

Resolution #14—Allergy Residency Training Program

(Introduced by Philip V. Dreyer, M.D., Delegate, Chariton-
Macon-Monroe-Randolph County Medical Society)

Whereas, The Conjoint Board of Allergy, now known as the American Board of Allergy and Immunology, was established without the approval of the AMA House of Delegates, and

Whereas, The new Board does not represent fully all physicians who practice allergy, mainly those in Dermatology, Otolaryngology and Family Practice, therefore, be it

Resolved, That the House of Delegates not approve the residency training program as prescribed by the AMA Council on Medical Education until all fields of allergy are represented, and be it further

Resolved, That the Delegates to the American Medical Association be instructed to present and support this resolution to the AMA House of Delegates.

(Referred to Reference Committee on Medical Education and Public Welfare.)

Dr. Patrick C. Hogan, Delegate, St. Louis Medical Society, introduced the following resolution:

Resolution #15—Definition of Beginning of Life in the Human

Whereas, The criteria for life, that is, growth, motion, metabolic activity and cell division, exist from conception, that is, fertilization of the ovum by a spermatozoon, and

Whereas, The same criteria exists with the implanted fertilized ovum, be it, therefore,

Resolved, That in the opinion of the Missouri State Medical Association, human life begins with conception and sustained life begins with implantation of the fertilized ovum, and, be it further

Resolved, That the Missouri State Legislature be notified of this definition.

(Referred to the Reference Committee on Miscellaneous Affairs.)

Dr. Troy O. Morgan introduced a resolution from Northwest Missouri County Medical Society.

Resolution #16—Official Declaration of Death in Certain Cases

Whereas, Most doctors are overworked and

Whereas, Many hospitals have no resident staff, and

Whereas, The law of the state of Missouri declares that a doctor must see a patient and pronounce him dead and

Whereas, This works a hardship on overworked physicians, especially during the hours of the night,

Now, Be It Therefore Resolved, That, in the case of prolonged illness and expected death, this ruling and law be changed to allow time to elapse before the body is viewed by a physician, providing, in the judgment of the physician, there is competent nursing personnel available to make this decision.

(Referred to Reference Committee on Miscellaneous Affairs.)

Dr. Gerald L. Miller introduced a resolution from the Seventh Councilor District.

Resolution #17—Recent Decision of U. S. Supreme Court on Abortions

Whereas, Medically and scientifically, a human embryo or fetus exists as a living and growing human individual from the time of conception; and

Whereas, Respect for and protection of human life has been a hallmark of civilized society for millennia; and

Whereas, Respect for and protection of unborn human life has been traditional with the medical profession since long before the beginning of the Christian era regardless of prevailing political, religious or social ideologies or dogmata; and

Whereas, A legal threat to the right to life of any individual member of a society imperils the right of every other member of that society; and

Whereas, In states in which abortion laws have recently been relaxed or repealed, professional medical ethics have proved to be wholly inadequate for the protection of the lives of the unborn; and

Whereas, The United States Supreme Court has withdrawn all legal protection from an entire class of human beings, namely, the unborn; and

Whereas, The Supreme Court in so doing has grievously exceeded its judicial authority and not only has invaded the legislative branch of the government, but has also overthrown the legislative will of the individual states; and

Whereas, The House of Representatives of the Missouri General Assembly has passed a resolution asking the Congress of the United States to propose an amendment to the Constitution which would guarantee the right to the unborn and for said action we compliment the House; now therefore, be it

Resolved, That the Missouri State Medical Association urges the Congress of the United States to take appropriate action toward amending the Constitution of the United States in order to re-establish and reaffirm that human life with legal personality begins at the time of conception and that all constitutional rights, including due process of law, apply to the unborn in the same manner and to the same extent as to all other citizens; and be it further

Resolved, That Delegates of the Missouri State Medical Association to the American Medical Association be instructed to introduce and pursue a resolution similar to this one in the House of Delegates of the AMA at the 1973 Annual Session of that body; and be it finally

Resolved, That the President of the Missouri State Medical Association be directed to forward copies of this resolution to the President of the United States, the Speaker of the House of Representatives of the United States, all members of the Missouri Congressional Delegation, the Governor of the State of Missouri, the President of the Senate of the Missouri General Assembly and the Speaker of the House of Representatives of the Missouri General Assembly.

(Referred to Reference Committee on Miscellaneous Affairs.)

Dr. Walter A. German introduced a resolution from Greene County Medical Society.

Resolution #18—Insurance Claim Forms

Whereas, There are a great number of insurance claim forms of varying complexity, be it

Resolved, That physicians should be encouraged to charge the insurance carrier for the completion of insurance claim forms which are not HIC (Health Insurance Council) approved forms. Until the Health Insurance Council standardizes its many approved forms, it will be the physicians' choice as to which HIC form he files. The physician also should feel free to make a reasonable charge for obtaining a duplicate copy of the completed form unless the form submitted contains a duplicate copy for the doctors' files; and be it further

Resolved, That physicians should feel free to charge for the additional service of filing more than one insurance claim form, especially if another HIC form is required in contrast to a photocopy of the original claim form; and be it further

Resolved, That the Health Insurance Council design and implement, after approval by the MSMA, a simplified one-sided, self-duplicating form with provision for designating patient disability and a blank for the stamp of the physician's or corporation's name and ID number.

(Referred to Reference C ommittee on Resolutions.)

Dr. Hubert A. Ritter and Dr. Denis Cavanagh introduced a resolution.

Resolution #19—Committee to Study Midwifery

Whereas, There has been a continuing decrease in maternal and infant mortality over the years since obstetrics has been practiced almost exclusively by trained physicians in hospitals, and

Whereas, A new effort is being made to include certified nurse midwives in the obstetrical team, and

Whereas, The State of Missouri has an antiquated definitio of what a midwife's training and limitation of activity should ir clude; now, therefore, be it

Resolved, That the House of Delegates of the Missouri Stat Medical Association authorize the appointment of a committee t study midwifery in the light of the joint statement on maternit care issued under the auspices of the American College of Obste tricians and Gynecologists which recognizes the nurse midwife a a member of a medically directed team. This committee woul have as its purpose to define midwifery. After defining nurse mic wifery they should determine if in the State of Missouri a need fc such services exists.

If a need exists, the committee should then propose an adequat educational program for certified nurse midwives. Finally, assum ing the need for certified nurse midwives has been determinec and the other aforementioned issues have been dealt with, the com mittee would then propose legislation to recognize the practice c nurse midwifery in Missouri, with the clear understanding that th nurse midwife will only function as a member of the obstetric team.

(Referred to Reference Committee on Medical Edu cation and Public Welfare.)

Dr. Ritter then introduced another resolution.

Resolution #20—Educational Money for the MMPAC

Whereas, The practice of medicine is being legislated in ou Congress and State General Assembly, and

Whereas, There is a need to increase physician awareness o this government involvement, thereby affecting physicians to be come politically active; now, therefore, be it

Resolved, That the House of Delegates of the Missouri Stat Medical Association authorize the Council of the Missouri Stat Medical Association to designate funds for use by the Missour Medical Political Action Committee Board to aid in promotion o this educational process.

It is anticipated that these funds will be used to pay for clerica help, printing, postage and other reasonable expense incurred by the Missouri Medical Political Action Committee Board. It shoul be further stated that none of this money shall be used for candidate or political party support.

(Referred to Refcrence Committee on Reports of Officers.)

Dr. Barney W. Finkel and Dr. Charles Jost introduced a resolution.

Resolution #21—Creed of Better Medical Care

Whereas, We hold to be self-evident that American Medicin is the best the world has ever seen and our American system of private medicine delivers the highest quality of care at the lowest possible cost, and

Whereas, The American citizen must continue to have a choic of private doctor for himself and his family, free from governmen interference, and private patients should continue to have acces to all available medical advances and treatment in full measure. without government-imposed rationing, and

Whereas, Public policy should recognize that good medical care requires that physician judgment remain free from pressures from third parties and government, and the fundamental freedoms of the American private health care system are to be preserved. e.g., freedom of choice of physician, freedom of choice of hospital and freedom to make the decisions inherent in the practice of medicine, the choice of diagnostic measure, treatment and medication. these decisions must remain the prerogative of physicians, not of government, and

Whereas, Current evaluation of the facts now lend little support to the concept of "Health Crisis," developed in the late 60's and upon which "Crisis Psychology" much "Crisis Legislation" was enacted which resulted in severe inflation of all medical care costs for which we are now paying. Improvements in the American free enterprise system of health care should be based on a careful evaluation of the performance "track record" of recommended solutions, therefore, be it

Resolved, That compulsory generic prescribing be deleted from federal programs, to prevent loss of lives and needless disability caused by the inadequacy of many of these drugs, and further be it

Resolved, That a moratorium on further Health Maintenance Organization experiments be imposed, until there has been a full accounting of the results of existing programs supported by tax subsidies, and be it further

Resolved, That all federal health programs be required to hav an independent audit, with a clear cost accounting for the services actually delivered, and a determination made whether the service intended was actually provided to the sick, and that this be regularly and widely published to keep the health programs centered on their purpose of health care of indigent citizens, and further be it

Resolved, That the MSMA recognize the responsibility of socie- for the care of the indigent sick and to provide for mutual responsibility with dignity for these citizens and to recommend that Direct Billing option be utilized in all health care programs and hat basic medical insurance coverage for the indigent be available ith supplementary "catastrophe" coverage and be it further

Resolved, That the confidentiality of medical records be pro-ected in all federal programs, especially that portion of the record ntaining personal information of citizens' private lives shall not e available to government agencies and carriers, and further

Resolved, That the MSMA decry federal control of patient care hrough the control of hospital admissions by government-approved committees computerization of illnesses through average ength of stay programs, denial of "necessity of hospitalization" by overnment clerks, Blue Cross and QAP (quality assurance programs) now being pushed by the American Hospital Association, nd the substituting of judgment of the attending physician by carriers, and government, and that the MSMA recommend that all overnment programs cease to interfere with the physician's judgment as to the admissions and discharge of patients, and be it finally

Resolved, That the MSMA oppose compulsory Universal Na-onal Health Insurance as likely to either bankrupt the country or ankrupt the patients' health by the necessary rationing of levels f care to that which the government can afford—not what the pa-ient wants or needs, and that the MSMA investigate the possibil-y of legal recourse to abolish PSRO, and the feasibility of legal ction against the government on constitutional grounds in its im-lementation of PSRO. (This course is now being very seriously tudied and contemplated by the State Medical Associations of In-iana and Oklahoma . . . and we as members of the MSMA should ssist these Associations, or take such action on our own if legal onsultation lends itself to such a course.)

(Referred to Reference Committee on Resolutions.)

Dr. Richardson K. Noback, Jackson County Medical ociety, introduced a resolution.

Resolution #22—Exclusion of Regional Medical Programs From the Federal Budget

Whereas, The Regional Medical Programs in the state of Mis-ouri have provided a positive organizational base from which phy-icians may effectively implement improvement in the health care ystems consonant with the responsible practice of medicine; and

Whereas, These same Regional Medical Programs have provid-d invaluable and irreplaceable technical assistance to the physi-ians' community and to the larger communities they serve, thus xpanding the general health care; and

Whereas, The Regional Medical Program has provided much eeded autonomy in the expenditure of federal resources directed oward local needs, now, therefore, be it

Resolved, That the Missouri State Medical Association deplores he exclusion of Regional Medical Programs from the Administra-ion's proposed 1974 federal budget; and be it further

Resolved, That the Missouri State Medical Association requests he Congress of the United States to extend the Regional Medical Program legislation and provide funding necessary for continua-ion and expansion of this valuable program; and be it further

Resolved, That the Missouri State Medical Association requests hat the Administration reexamine its position and recognize Regional Medical Program as an effective force responsible to the private sector of the health care system for improved health care services in line with regional priorities; and be it finally

Resolved, That the Missouri State Medical Association instructs ts officers to forward a copy of this resolution to members of the Missouri congressional delegation.

(Referred to the Reference Committee on Miscellaneous Affairs.)

Dr. David N. Kerr, Delegate-at-Large, introduced the ollowing resolution:

Resolution #23—Monthly Visitation to Nursing Home Residents

Whereas, The present law requiring monthly visitation by phy-icians to residents of nursing homes is unfair to those residents, he nursing home management and the physicians and is based upon the erroneous concept that such regular visitation is good and desirable for the best health of the residents, and

Whereas, There is nothing that from a strictly medical standpoint requires that any person purely because of age should be een once a month. It is not a common medical practice nor is it deemed good and desirable medicine to attend the elderly with any requently scheduled regularity prior to their residence in a nurs-ng home. There also is nothing about the change of residence that dictates a change in medical practice, and

Whereas, The law is unfair to the residents because it is unnecessary medically and, also, an unnecessary additional expense. There is generally little of medical significance that is found in the uncomplaining patient, and

Whereas, The law is unfair to the nursing home management because it places them either in the position of being unable to implement the law upon an unwilling physician or of hiring a physician to what have derogatorily come to be called gang rounds—simply to satisfy the law, and

Whereas, The law is unfair to the physician because it places a burden upon him to make medical calls that he may consider medically unnecessary, and, therefore, be it

Resolved, That the legislature be petitioned to revoke the present requirement for regular monthly visitation by a physician to all residents of nursing homes and simply require that nursing home supervisors consult with physicians as deemed medically necessary to maintain their residents optimum state of health.

(Referred to the Reference Committee on Miscellaneous Affairs.)

Dr. Ronald Hoffman, St. Louis Medical Society, introduced a resolution.

Resolution #24—Physician-Patient Privilege

Whereas, The United States Supreme Court has attempted to adopt new rules of evidence for the federal judiciary which would abolish the physician-patient privilege, except for the communications involving mental problems, and

Whereas, These new rules of evidence are discriminatory against physicians inasmuch as no other privilege—husband-wife, lawyer-client, clergyman-penitent—would be abolished or circumscribed, and

Whereas, These rules of evidence are subject to review and modification by the Congress, and

Whereas, Representatives of the Medical Profession have strongly urged Congress in testimony before a House Judiciary Subcommittee to retain the physician-patient privilege, and

Whereas, Abolition of the physician-patient privilege would interfere with good medical practice by making patients fearful of revealing important information to the physician because the physician might be forced to disclose the information in open court, and

Whereas, Adoption of these rules for federal courts would have the effect of weakening and eventually destroying state laws conferring the physician-patient privilege, therefore, be it

Resolved, that the MSMA House of Delegates urge its members to communicate with their senators and representatives urging them to vote to veto the new rule (#504) abolishing physician-patient privilege in federal courts, and be it further

Resolved, That the MSMA send a copy of the new rule (#504) to each member and poll each member for his opinion or vote for or against the new rule, and the results of the poll be sent to each U. S. senator and representative from Missouri with a letter requesting their vote against this oppressive rule and urging them to strengthen the physician-patient privilege in the federal courts as well as in the state courts.

(Referred to Reference Committee on Resolutions.)

Dr. Stanley Peterson, Greene County Medical Society, introduced the following resolution:

Resolution #25—Re: Missouri Physicians' Guild

Whereas, The organization known as "The Missouri Physicians' Guild" was organized at the request of the Greene County Medical Society, and

Whereas, The Missouri Physicians' Guild does, in fact, provide a "mechanism for negotiating not only fees but the conditions under which services will be provided," and

Whereas, The reasons for such an organization are even more compelling than they were when the above request was made, therefore, be it

Resolved, That the Greene County Medical Society endorse the Missouri Physicians' Guild as a mechanism to negotiate not only physicians' fees, but, also, the conditions under which services will be provided.

(Referred to Reference Committee on Resolutions.)

Dr. P. B. Salanga, St. Louis Medical Society, introduced a resolution.

Resolution #26—Abortion

Whereas, Conception, in woman, has been sufficiently proven, persistently and consistently, to be the beginning of and result in an Individual Human Life (even if occasionally deformed), and

Whereas, Intentional violence, as recently legalized and intended by the United States Supreme Court in its abortion decision when committed upon this natural process of growth and development of the products of conception in woman, will consistently lead to destruction and demise of that (expected) individual human life, and

Whereas, Legalization of violence of this type results in abolition of order, discipline and the likely eventual end of a free society, therefore, be it

Resolved, That the House of Delegates of the MSMA advise that abortion is:

1. In violation of the Hippocratic Oath.
2. Contrary to the mission of the physician—who is to help heal and preserve individual human life—and not to destroy it, and be it further

Resolved, That the MSMA submit this Resolution to the AMA, to all the AMA State Component Associations, a copy to all the State Supreme Courts in the United States, all of the United States Supreme Court Justices and to all U. S. senators and congressmen from and representing Missouri.

(Referred to Reference Committee on Miscellaneous Affairs.)

Dr. Donald R. Judd, St. Louis Medical Society, introduced the following resolution:

Resolution #27—Broader Participation in MSMA and AMA

Whereas, It is beneficial for organized medicine to have the broadest possible participation and representation by its membership, and

Whereas, It is particularly desirable to encourage younger physicians to represent and serve organized medicine; therefore, be it

Resolved, That the Missouri State Medical Association limit the term of its own Council members and the term of AMA delegates from Missouri to not more than three terms of two years each (overall six years) to become effective with date of passage of this resolution; and furthermore, be it

Resolved, That the AMA be urged to establish a similar term for all AMA delegates from component state societies.

(Referred to Reference Committee on Constitution and Bylaws.)

Dr. Joseph Swope, St. Louis Medical Society, introduced a resolution.

Resolution #28—Quality Assurance Program (QAP)

Whereas, In the near future (May 11-13, 1973), the MSMA and the Missouri Hospital Association are cosponsoring a so-called "educational program" on QAP or "Cook Book" approach to Peer Review Activities at the Lake of the Ozarks, and

Whereas, The QAP is being "pushed" vigorously nationwide to control medical practice and the private practicing physician with the use of clerks, nurses and paramedical personnel by the American Hospital Association, and

Whereas, The medical staffs of several large metropolitan St. Louis hospitals have unanimously rejected QAP and its attempt to control the practice of medicine; this rejection taking place after thorough study of QAP and all of its meanings, therefore be it

Resolved, That the MSMA House of Delegates and the Council of the MSMA not allow QAP to be approved or taken seriously without first allowing the individual MSMA member to participate in a referendum for this purpose . . . and it is hoped that the MSMA will not be involved in a quagmire of dissension, distrust, desertion of members and in potential legal actions being taken against the MSMA leadership for profligate authority.

(Referred to Reference Committee on Miscellaneous Affairs.)

Dr. Swope then introduced the following resolution:

Resolution #29—Legal Action Against PSRO

Whereas, The Department of HEW is preparing rules and regulations and taking other steps preparatory to enforcing the Professional Standards Review Organization Law embodied in P.L. 92-603, and

Whereas, Enforcement of PSRO would destroy the freedom of physicians to exercise independent judgment in caring for Medicare and Medicaid patients by forcing them to conform to government-imposed "norms" of diagnosis and treatment, and

Whereas, Standardization of medical care will seriously impair the quality of medical care to the detriment of these patients by restricting a physician's liberty to use his own judgment, skill and knowledge freely and without interference from government bureaucrats, and

Whereas, Physicians who deviate from government's arbitrary "norms" will be subject to punishment, no matter how much harm to the patient will result from adherence to the norms, and

Whereas, This vicious law would be employed to subject physicians to public scorn and ridicule and, thereby, undermine public confidence in the medical profession, and

Whereas, Justification for the PSRO law as based on the false assumption that government can effectively govern medical quality and control costs and the malicious libel that physicians are responsible for rising health care costs while the blame actually lies with profligate government, and

Whereas, Enforcement of the unjust and unjustified PSRO law would violate the constitutional rights of physicians and patients, and

Whereas, The only recourse open to the medical profession is legal action to restrain the government from implementing the PSRO law, therefore, be it

Resolved, That the House of Delegates of the MSMA endorses seeking assistance of and consultation with attorneys specializing in Constitutional law to test the validity of P.L. 92-603 (the PSRO portion thereof), and if the Constitutional rights of physicians/patients have been abridged, then the MSMA should join with other State Medical Associations* (if possible) to repeal this law, and the MSMA membership would be polled and informed of any such contemplated action and an assessment of the membership to cover the costs should be made to carry this case to the Supreme Court (if necessary).

(**Note:* The Oklahoma State Medical Association and the Indiana State Medical Association are presently contemplating such action.)

(Referred to Reference Committee on Resolutions.)

Dr. Richard Bowles, Clay County Medical Society, introduced a resolution.

Resolution #30—Federal Drug Administration Regulations

Whereas, The Federal Drug Administration (FDA) has been vested with unprecedented regulatory powers influencing the research, production and marketing of drugs, and

Whereas, The drug industry has been intimidated by these regulatory powers to the extent that many drugs or drug combinations extremely useful to clinicians have been removed from production, and

Whereas, Physicians actively engaged in the practice of medicine, being deprived of the use of said controversial products, are in no ways afforded any opportunity for constructive input into these determinations, be it therefore

Resolved, That the Missouri State Medical Association and the American Medical Association and the drug industry renew their protests to the Government of the United States against this agency and its arbitrary regulatory powers, to the extent that significant censorship of the FDA in this area of activity be realized.

(Referred to Reference Committee on Medical Education and Public Welfare.)

Dr. R. Bruce McCloskey, St. Louis Medical Society, introduced a resolution.

Resolution #31—PSRO

Whereas, It is apparent that progressively, rules and regulations which have been the unwritten codes for medical practice are being reduced to written, enforceable law, and

Whereas, The inevitable twin of written regulations is an enforcement agency, and

Whereas, such enforcement agencies will, necessarily, be endowed with increasing authority,

Whereas, The American tradition is based upon a philosophy that the powers of authority be delegated to those who exercise them by those over whom the authority is to be exercised, and

Whereas, Such powers will be reposited in such persons for a limited term, following which they must stand for reelection, therefore be it

Resolved, That any authoritative organization that may be developed to regulate or administer a PSRO be elected locally by the physicians over whom they shall have authority and must stand for reelection each four years, and be it further

Resolved, That if and when such an organization be formed, one half be elected for two years and one half for four years, following which all shall be elected for four-year terms.

(Referred to Reference Committee on Resolutions.)

Dr. C. W. Chastain, Mineral Area County Medical Society, introduced the following resolution:

Resolution #32—Blue Cross and Blue Shield Regulations

Whereas, The Senate and House of Representatives of the General Assembly of the state of Missouri are now considering certain proposed legislation for the regulation of health service corporations, which affects Missouri Medical Service and the other

Blue Shield and Blue Cross Plans in the State of Missouri, and

WHEREAS, Missouri Medical Service (the St. Louis Blue Shield Plan) has been sponsored by this Association, and

WHEREAS, Such proposed legislation seeks to establish a system of administrative regulation which is unnecessary in view of the existing safeguards already protecting the members of Blue Shield and Blue Cross, and

WHEREAS, Such proposed legislation establishes cumbersome administrative procedures which will make it difficult or impossible for Blue Shield and Blue Cross to adapt and extend their plans and services to meet the needs of their members, and

WHEREAS, Such proposed regulation jeopardizes the corporate structure and tax-exempt status of Missouri Medical Service, and

WHEREAS, Such proposed legislation, if put into effect, must necessarily result in an increase in the cost of the operation of Blue Shield and Blue Cross which can only be met by an increase in the dues paid by the members, and

WHEREAS, It is not in the best interest of the people of the state of Missouri, including the more than 950,000 members and their dependents of Missouri Medical Service and the more than 3 million members and their dependents of all Blue Shield and Blue Cross Plans in the state of Missouri to increase the cost and decrease the services offered by Blue Shield and Blue Cross, therefore, be it

Resolved, That this Association oppose the enactment of all legislation affecting Blue Shield and Blue Cross now pending in the General Assembly of the State of Missouri, and be it further

Resolved, That the officers of this Association be directed to transmit this Resolution to the Senate and House of Representatives of the General Assembly of the state of Missouri and to such other persons as such officers deem to be in the best interest of this Association.

(Referred to the Reference Committee on Miscellaneous Affairs.)

There being no additional business, the Speaker declared the first session of the House of Delegates adjourned.

SECOND SESSION

Friday, March 30, 1973

The Second Session of the House of Delegates was called to order at 4 PM in the Khorassan Room by Dr. E. D. Imes, Speaker, who presided.

Dr. Pennington, Chairman of the Credentials Committee, reported that a quorum was present.

The Speaker invited Dr. Robert H. Felix, Chairman of the Reference Committee on Constitution and Bylaws, to make his report.

CONSTITUTION AND BYLAWS

The Reference Committee on Constitution and Bylaws met on Thursday, March 29, following the session of the House of Delegates. All Committee Members were present.

Representation From Medical Students

The first order of business was consideration of the proposed change in Chapter 3 of the Bylaws, which was referred to this Committee by action of the House of Delegates on March 29, 1973. The proposed change would add a new paragraph to Section 2 of Chapter 3, to be numbered 2-A, which would read as follows:

> Each of the medical schools in the state of Missouri shall be entitled to send each year two student delegates, each from a different class, elected by the student body of the said medical school. The names of such student delegates shall be certified by the dean of said medical school to the Secretary of this Association 30 days before the annual session. Such student delegate shall have all the rights and privileges of all other delegates.

This change provides the mechanism for implementing the Constitutional amendment adopted by the House on March 29, 1973.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion to adopt was seconded and carried. At this time, the students were registered as Delegates and seated. They were Ms. Pat Hubble and Mr. Merlin Brown, University of Missouri-Kansas City; Mr. James Barton and Mr. Barry Farber, Washington University; Mr. R. M. Rutkow and Mr. John P. Jones, St. Louis University; and Mr. Arlin Lockard and Mr. John Brandt, University of Missouri-Columbia.)

Resolution #6—Dues for Physicians in House Staff Training Programs

The next order of business was discussion of Resolution #6.

The Committee interpreted this to mean House Officers in training, which are the physicians already covered under Chapter 1 of the Bylaws. The dues to be assessed these physicians are specified in Chapter 8 at $10 per year. Therefore, it is felt that since the objectives of Resolution #6 are already covered in our Bylaws, there is no need to take further action.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and approved.)

Resolution #13—Constitutional Amendment on Speaker's Qualifications

The next order of business was the discussion of Resolution #13. The purpose of this resolution is to clarify the procedures for election of the Speaker and the Vice-Speaker, which are contained in Article IV of the Constitution.

During the discussion of this proposed amendment, it was pointed out that since the Speaker and Vice-Speaker are not elected at the same time as other Delegates, it could be possible to have either the Speaker or Vice-Speaker fail of election with the result that the House of Delegates would be without these officers.

The Reference Committee feels that this is another example of the need for a serious review of the entire Constitution with the view to correcting such ambiguous provisions. The purpose of this Resolution will be fulfilled if Chapter 3, Section 2 of the Bylaws be modified in its last sentence, inserting the words "The Speaker and Vice-Speaker" and following the word "Association." This sentence would then read:

> All Past-Presidents of the Association, the Speaker and the Vice-Speaker, shall serve as Delegates-at-Large.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and passed.)

Resolution #27—Broader Participation in MSMA and AMA

The next order of business was the consideration of Resolution #27. Following extensive discussion of this resolution by members of the Association who were present at the hearings, the resolution was discussed and its implications were considered by the members of the Committee in Executive Session. It is the feeling of the Reference Committee that all of the objectives which the Resolution attempts to attain are presently possible under the provisions of our Constitution and Bylaws as now written.

To paraphrase, the fault is not in our Constitution and Bylaws, but in ourselves. If we lack commitment, dedication and concern, no legislative change will cure our malaise.

Mr. Speaker, I move that Resolution #27 not be adopted.

(The motion was seconded. After discussion, it was approved.)

Mr. Speaker, I move the adoption of the report as a whole.

(The motion was seconded and carried.)

The Speaker invited Dr. E. Warren Allen, Chairman, to present the report of the Reference Committee on Miscellaneous Affairs.

MISCELLANEOUS AFFAIRS

The Reference Committee on Miscellaneous Affairs convened in a general hearing session in the Lido Room of the Chase-Park Plaza Hotel on Thursday, March 29, 1973. Open discussion was held from 4:20 PM until 6:15 PM. The Executive Committee convened at 6:30 PM, with Dr. E. Warren Allen, Chairman, presiding. All members of the Committee were present.

The Committee reviewed the report of the **Commission on Public Affairs,** which was referred to the Miscellaneous Affairs Committee. These portions of the **Council Minutes** of June 3-4, 1972; September 16-17, 1972; December 9-10, 1972; and February 2-3, 1973, were all considered. The Committee recommends adoption of this portion of the report.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

The Committee considered the report submitted by the **Commission on Public Affairs** and recommends adoption of this portion of the report.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

The Committee considered the report submitted by the **Commission on Interspecialty Medicine.** The Committee recommends adoption of this portion of this report.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

The Committee considered the report submitted by the **Committee on Legislative Affairs.** The Committee recommends adoption of this portion of the report.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

The Committee reviewed the **Supplemental Report of the Council.** The Committee considered the report given on the VD Workshops and approved this as written. The Committee considered the report of the AMA-AMPAC Workshop, and recommended approval of the Medicredit Bill.

The Committee reviewed Dr. Matthews' request "That we give the staff all the help, encouragement and moral support that we can" in keeping the 70 bills now under consideration under observation. The Committee approved this portion of the report.

The Committee reviewed Dr. Ladyman's involvement in the observation of the QAP and approved his continuance in this matter.

The Committee reviewed the following motion made by the Executive Session:

"As a general rule, the Council of the Missouri State Medical Association opposes the granting of a license to practice medicine to any physician who has been convicted of a felony."

The Committee recommends approval of this portion of the Supplemental Report of the Council.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried unanimously.)

Resolution #1—Emergency Medical Service

The Committee considered Resolution #1 submitted by the MSMA Ad Hoc Committee on Emergency Medical Services and St. Louis County Medical Society. The Committee recommends approval of this resolution as written.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

Resolution #9—Health and Hospital Insurance for Newborn

The Committee considered Resolution #9, which was submitted by Dr. Francis X. Lieb, St. Louis Medical Society. The Committee approved this resolution with the amendment changing the word "conception" to "birth" on the last word of the second line of the first Resolution.

Mr. Speaker, I move the adoption of this portion of the report as amended.

(The motion was seconded and passed.)

Resolution #3—Rubella Immunization Requirements for Marriage License

The Committee considered Resolution #3 submitted by Dr. Melvin M. Schwartz, St. Louis County Medical Society. The Committee recommends that this resolution not be adopted.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and passed.)

Resolution #4—Revision of Federal Narcotics Law

The Committee considered Resolution #4, submitted by Dr. Melvin H. Schwartz, St. Louis County Medical Society. The Committee recommends that Resolution #4 not be adopted.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and approved.)

Resolution #5—Endorsement of Medicredit Legislation

The Committee considered Resolution #5, which was submitted by Dr. Hubert A. Ritter, St. Louis Medical Society. The Committee recommends approval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

Resolution #7—Repeal of Missouri Controlled Substance Law

The Committee considered Resolution #7 submitted by Dr. George L. Hawkins, St. Louis Medical Society. The Committee disapproved this resolution, but feels that this problem deserves further study.

Mr. Speaker I move the adoption of this portion of the report.

(The motion was seconded and approved.)

Resolution #8—Recent Decision of U.S. Supreme Court on Abortion

Resolution #17—Recent Decisions of U.S. Supreme Court on Abortions

Resolution #26—Abortion

The Committee considered Resolutions #8, #17 and #26 on abortions. By consensus of those who introduced these resolutions, they were condensed into a single resolution, which hereafter shall be referred to as Revised Resolution #17. The contents are as follows:

Revised Resolution #17

(°°° *Note:* No deletions were made from Resolution #17. After the second WHEREAS, an addition from Resolution #26 of the first Resolution was made as an additional WHEREAS. An insertion of the first Resolution of Resolution #8 was made following the first *Resolved* of Resolution #17.)

WHEREAS, Medically and scientifically, a human embryo or fetus exists as a living and growing human individual from the time of conception; and

WHEREAS, Respect for and protection of human life has been a hallmark of civilized society for millenia; and

°°° WHEREAS, The House of Delegates of MSMA advise that abortion is;

1. In violation of the Hippocratic Oath.
2. Contrary to the mission of the physician, who is to help heal and preserve individual human life—not to destroy it, and

WHEREAS, Respect for and protection of unborn human life has been traditional with the medical profession since long before the beginning of the Christian era, regardless of prevailing political, religious or social ideologies or dogmata; and

WHEREAS, A legal threat to the right to life of any individual member of a society imperils the right to life of every other member of that society; and

WHEREAS, In states in which abortion laws have recently been relaxed or repealed, professional medical ethics have proved to be wholly inadequate for the protection of the lives of the unborn; and

WHEREAS, The United States Supreme Court has withdrawn all legal protection from an entire class of human beings, namely, the unborn; and

WHEREAS, The Supreme Court in so doing has grieviously exceeded its judicial authority, and not only has invaded the Legislative branch of the government, but has also overthrown the legislative will of the individual states; and

WHEREAS, The House of Representatives of the Missouri General Assembly has passed a resolution asking the Congress of the United States to propose an amendment to the Constitution which would guarantee the right to the unborn and for said action we compliment the House; now therefore be it

Resolved, That the Missouri State Medical Association urges the Congress of the United States to take appropriate action toward amending the Constitution of the United States in order to reestablish and reaffirm that human life with legal personality begins at the time of conception, and that all constitutional rights, including due process of law, apply to the unborn in the same manner and to the same extent as to all other citizens; and be it further

°°° *Resolved*, That the House of Delegates of the MSMA petition all the Missouri members of the Congress to remove from the jurisdiction of the Supreme Court all matters pertaining to abortion; and be it further

Resolved, That Delegates of the Missouri State Medical Association to the American Medical Association be instructed to introduce and pursue a resolution similar to this one in the House of Delegates of the AMA at the 1973 Annual Session of that body, and be it finally

Resolved, That the President of the Missouri State Medical Association be directed to forward copies of this Resolution to: The President of the United States, the President of the Senate of the United States, the Speaker of the House of Representatives of the United States, all members of the Missouri Congressional Delegation, the Governor of the State of Missouri, the President of the Senate of the Missouri General Assembly and the Speaker of the House of Representatives of the Missouri General Assembly.

The Committee recommends that this consolidated resolution be adopted.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded. At this point, Dr. O. Dale Smith presented a minority report, which consisted of the following substitute resolution:

WHEREAS, The House of Delegates of MSMA has affirmed its position of liberalization of legislation on abortion, and

WHEREAS, The position of the House of Delegates of MSMA is permissive only and neither forces or encourages abortion, and

WHEREAS, The House of Delegates has always had a deep concern of legislation that is restrictive of personal rights and freedom of choice, and

WHEREAS, Laws which infringe upon individual freedom of choice where the State cannot show a compelling interest, should be ruled unconstitutional, and

WHEREAS, A definition of the time and product of conception are deemed to be a living soul, a human being, have not been clearly determined either legally, medically, morally or theologically, and

WHEREAS, Medicine today has awakened to its responsibility in dealing with the quality of life as well as the quantity of life, therefore, be it

Resolved, That the House of Delegates reaffirm its position in favor of legislation to permit the right of an individual to make a personal decision relative to pregnancy or its termination.

Dr. Smith moved that the minority report be substituted for the majority report and his motion was seconded. After extensive discussion, Dr. Joseph L. Fisher moved that both reports be tabled. Dr. Fisher's motion was seconded and carried.)

Resolution #15—Definition of the Beginning of Life in the Human

The Committee considered Resolution #15, which was submitted by Dr. Patrick C. Hogan, St. Louis Medical Society. The Committee disapproved this resolution.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded. After Dr. Hogan asked for reconsideration of Resolution #15, Dr. Smith moved that the resolution be tabled. Dr. Smith's motion was seconded and carried.)

Resolution #22—Exclusion of Regional Medical Programs From the Federal Budget

The Committee considered Resolution #22, which was submitted by Dr. Richardson K. Noback, Jackson County Medical Society. The Committee disapproved this resolution.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded. After extensive discussion, the motion was defeated.)

Resolution #23—Monthly Visitations to Nursing Home Residents

The Committee considered Resolution #23, which was submitted by Dr. David N. Kerr for Dr. Edward D. Kinsella, St. Louis Medical Society.

The Committee disapproved Resolution #23. The Committee also recommended that further accurate information is desirable for clarification.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

Resolution #28—Quality Assurance Program (QAP)

The Committee considered Resolution #28. The Committee was in agreement with the intent of this resolution. Since a similar resolution is being considered by the Resolutions Committee, the recommendation of this Committee is that Resolution #28 not be adopted.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and defeated.)

Resolution #32—Blue Cross and Blue Shield Regulations

The Committee considered Resolution #32, which was submitted by Dr. C. W. Chastain. The Committee recommended adoption of this resolution.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded. There was considerable discussion, during which Dr. James C. Sisk, who is Chairman of the Board of Missouri Medical Service for St. Louis Blue Shield, read the following letter which he had written to doctors in the Missouri Medical Service area on March 14:

"Legislative proposals containing a large number of provisions detrimental to the best interests of Blue Shield and its physicians and subscribing members are now being considered by the Missouri General Assembly. The bills, Senate Bill #3, and House Bills #235, #256, and #321, are totally unnecessary attempts to change a clear, longstanding, public policy, which has been fully approved by the people of Missouri. All four would subject Blue Shield to regulation by the Superintendent of the Division of Insurance.

"One would impose a direct premium tax on members' dues, and all would inevitably increase Blue Shield costs, increases which would have to be paid by members in the form of higher dues. All four of the bills provide that both medical, surgical and hospitalization benefits may be furnished by the same corporation, a provision we feel is not in the best interest of the public.

"All four would require prior approval of membership benefit programs with various degrees of power vested in the Superintendent of Insurance. The three House Bills give an unrestricted power to disapprove membership agreements, while Senate Bill #3 provides a somewhat more limited power, delays in offering new programs to the public could result with accompanying expense and damage to the plan. All of the bills provide for financial examination of health services corporation by the Superintendent of Insurance. Blue Shield is regulated and supervised under the Missouri Statutes governing nonprofit corporations, by the Attorney General and the Circuit Courts. It is required to conform to high national standards set up by the National Association of Blue Shield plans. Its financial condition is audited twice each year by a nationally-recognized Certified Public Accountant. Further examination is felt to be unnecessary. All four regulatory bills exempt labor organization health plan and employer-employee plans, benefit plans from supervision. And Blue Shield is not opposed to such plans, such exemptions. However, discrimination against those who are not part of labor organizations, those who belong to groups, but are not employees, as, for example, Farm Bureau members, and those who belong to no group at all, it has the effect of increasing health care costs for those who are regulated, as compared to members of groups that are not regulated.

"Regulation of Blue Shield may, in addition, provide ways to force payment of benefits for chiropractic service. The Missouri law prohibits the issuance of health insurance policies limiting freedom of choice of physicians. surgeons, optometrists and chiropractors. The Attorney General has held that health insurance policies must not exclude payments for chiropractors. While Blue Shield membership agreements are not health insurance policies, the broad powers given the Superintendent of Insurance under the regulation proposed, may well have opened the way for an attempt to force coverage of chiropractic service corporations, including Blue Shield."

After further discussion, Dr. Paul F. Max moved that Resolution #32 be referred back to the Reference Committee on Miscellaneous Affairs for further consideration. The motion was seconded and passed.)

Mr. Speaker, I move the adoption of this report as amended.

(The motion was seconded and carried.)

Resolution #22—Exclusion of Regional Medical Programs From the Federal Budget

Dr. Smith rose to a point of order. Since action had not been taken by the House on Resolution #22, he moved the adoption of Resolution #22 as an amendment to the report of the Reference Committee on Miscellaneous Affairs.

(The motion to adopt was seconded and carried.)

Resolution #28—Quality Assurance Program (QAP)

Dr. Lawrence O'Neal introduced a motion to refer Resolution #28 back to the Reference Committee on Miscellaneous Affairs for reconsideration.

(The motion was seconded and approved.)

The Speaker invited Dr. Robert A. Mayer, Chairman, to present the report of the Reference Committee on Resolutions.

RESOLUTIONS

The meeting of the Reference Committee on Resolutions was held at 4:30 PM on March 29, 1973, in the Khorassan Room of the Chase-Park Plaza Hotel with all members present.

The **Council Minutes** as published in the *Journal* of the Missouri State Medical Association were reviewed by the Committee. They included the meetings held on April 9, 1972; June 3 and 4, 1972; September 16 and 17, 1972; December 9 and 10, 1972; and February 2 and 3, 1973. They were approved by the Committee as published.

The **Council Minutes** of February 2-3, as published in he Delegates' Manual, also were reviewed and approved.

Mr. Speaker, I move the adoption of this portion of the eport.

(The motion was seconded and carried.)

Portions of the **Supplemental Report of the Council** neeting of March 28, 1973, which were referred to the Committee on Resolutions, were reviewed and approved.)r. Hector Benoit presented the following Resolution:

> That the Council of the Missouri State Medical Association recommend to the House of Delegates of MSMA that endorsement e given to the Health Care Foundation of Missouri, in its efforts o become the responsible agency for PSRO activities in Missouri.

This was adopted by the Council.

Mr. Speaker, I move the adoption of this portion of the eport.

(The motion was seconded and passed.)

The **1973 Annual Report of the Health Care Foundation of Missouri** was reviewed by the Committee and approved as published.

Mr. Speaker, I move the adoption of this portion of the eport.

(The motion was seconded and carried.)

Report of the **Ad Hoc Committee for the Negotiation of Professional Fees, January 17, 1973.** The report was eviewed by the Committee, followed by extensive discussion of all interested parties. It was the consensus of he Committee that the idea of a Physicians' Guild was ot the most desirable mechanism at this time for dealng with the socio-economic problems of medicine as hey stand today.

The Committee strongly urges more aggressive leaderhip in establishing uniformity of action to protect the raditional rights of patient-physician relationships, et etera.

The Committee commends Dr. Stanley Peterson and is Committee for their indepth study of the problem, ut feels that an approach through the AMA is more deirable than a physicians' union or guild and recommends hat Dr. Peterson and his committee pursue this course f action.

Mr. Speaker, I move the adoption of this portion of the eport.

(The motion was seconded. After discussion, Dr. Stanley Peterson moved that the report of the Reference Committee be modified as follows:

That Paragraph 1 and Paragraph 3 be deleted and in ts place, there be a clause which says that the House of Delegates of the Missouri State Medical Association enlorses the Missouri Physicians' Guild as a mechanism hrough which physicians can negotiate not only fees, but lso the conditions under which services may be rendlered.

Dr. Peterson's motion was seconded. Dr. Allen Klippel hen spoke to the subject and moved that the matter of he Physicians' Guild be tabled to give members an opportunity to gain further information.

Dr. Klippel's motion was seconded and carried.)

The report of the **Commission on Medical Economics, Third Party Medicine and Governmental Regulations** was eviewed by the Committee. The Committee recommends its approval, except for the deletion of the last two paragraphs.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

The Committee reviewed and approves the report of the **Ad Hoc Committee on Third Party Payments to Patients** as published.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

The Committee reviewed the report of the **Ad Hoc Blue Shield Committee** and accepted it as submitted. The Committee also notes that a resolution has been introduced opposing Blue Shield's coming under the control of the Missouri State Insurance Commission.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

Resolution #2—Special Committee to Study Ways and Means to Deal With the General Trend of Legislated Medical Care

The Committee considered Resolution #2, which was introduced by Clay County Medical Society. The Committee feels that this problem is being currently dealt with the Ad Hoc Committee for the Negotiation of Professional Fees. The Committee recommends disapproval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and passed.)

Resolution #18—Insurance Claim Forms

Resolution #18 was introduced by Greene County Medical Society. The Committee reviewed this resolution and recommends its approval.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and passed.)

Resolution #21—Creed of Better Medical Care

The Committee recommends rejection of Resolution #21 in its current form. Recognizing that the resolution has good points, the Committee, therefore, recommends that it be rewritten.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

Resolution #24—Physician-Patient Privilege

Resolution #24, which apparently deals with a U. S. Supreme Court decision and a Senate or House Rule #504 is rejected for lack of information and failure of the presented to testify in favor of his resolution.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and passed.)

Resolution #25—Missouri Physician's Guild

The Committee rejects Resolution #25 because, as printed, it is not directed to the attention of the Missouri State Medical Association.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

Resolution #31—PSRO

Resolution #31 was introduced by Dr. Bruce McCloskey of St. Louis. Discussion relative to PSRO was extensive, and testimony by Dr. Hector Benoit indicated that major adjustments in the Health Care Foundation bylaws paralleled the thinking of this resolution with respect to democratic elective procedures. The Committee recommends no action on this resolution.

Mr. Speaker. I move the adoption of this portion of the report.

(The motion was seconded and passed.)

Resolution #29—Legal Action Against PSRO

The Committee considered Resolution #29. The Committee recommends that the MSMA and the Health Care Foundation keep a close surveillance of the activity of the Oklahoma and Indiana state medical associations with respect to testing the constitutionality of PSRO, Public Law PL-92-603. The Committee recommends no further action on this resolution.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded. After a discussion, the motion was passed.)

Mr. Speaker, I move the adoption of this report as a whole.

(The motion was seconded and approved.)

The Speaker invited Dr. Andrew McCance, Chairman of the Reference Committee on Medical Education and Public Welfare, to give his report.

MEDICAL EDUCATION AND PUBLIC WELFARE

The Committee on Medical Education and Public Welfare met at the Chase-Park Plaza Hotel in St. Louis on Thursday, March 29, 1973 at 4:15 PM. Four members of the Committee were present. It was recommended that the published **Minutes of the Council Meetings** of June 3-4, 1972, September 16-17, 1972, December 9-10, 1972 and February 2-3, 1973, and the Supplemental Report of the Council, be approved.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and approved.)

The report of the **Commission on Continuing Education and Health Manpower**, the **Ad Hoc Committee on Continuing Medical Education**, the **Ad Hoc Committee on Health Manpower** and the **Ad Hoc Committee—115th Annual Session** were reviewed and approved.

The Committee commends the **Commission on Continuing Education and Health Manpower** for the excellent work it is carrying on.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and approved.)

Resolution #10—Required Continued Medical Education

Resolution #10 was introduced by Jasper County Medical Society. Considerable testimony was given on this resolution, including testimony by the Chairman of the Ad Hoc Committee on Continuing Medical Education. It is felt by the Reference Committee that further work currently being carried out by the Ad Hoc Committee on Continuing Medical Education will be necessary before making a recommendation concerning Required Continued Education for State Licensure.

The Committee recommends disapproval of Resolution #10.

Mr. Speaker, I move adoption of this portion of the report.

(The motion was seconded and carried.)

Resolution #11—Continuing Medical Education

Resolution #11 was introduced by Dr. Kenneth Bruns, Delegate from St. Louis Medical Society. The Reference Committee felt that if this resolution is adopted, it may restrict some of the activities of the Ad Hoc Committee on Continuing Medical Education. It was felt also that the discussion on this resolution brought out the points concerning disciplinary action as a part of continuing medical education, which needed to be discussed. The Committee recommends disapproval of the resolution.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded. After discussion, it was approved.)

Resolution #12—Continuing Medical Education

Resolution #12 was introduced by Dr. Kenneth Bruns of St. Louis Medical Society. Because of the same reasons for recommending disapproval of Resolutions #10 and #11, the Committee recommends disapproval of Resolution #12.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

Resolution #14—Allergy Residency Training Program

Resolution #14 was introduced by Dr. Phillip V. Dreyer, Delegate from Chariton-Macon-Monroe-Randolph County Medical Society.

The Committee heard directly conflicting testimony on the facts regarding the establishment of the Con-Joint Board of Allergy. Because of uncertainty concerning the facts of the resolution, the Committee recommends disapproval.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and passed.)

Resolution #19—Committee to Study Midwifery

Resolution #19, introduced by Dr. Hubert A. Ritter and Dr. Dennis Cavanagh, would authorize a Committee to Study Midwifery.

The Committee recommends deletion of the first sentence of the last paragraph of Resolution #10, and the resolution is recommended for adoption in the following modified form:

> Whereas, There has been a continuing decrease in maternal and infant mortality over the years since obstetrics has been practiced almost exclusively by trained physicians in hospitals, and
>
> Whereas, A new effort is being made to include certified nurse midwives in the obstetrical team, and
>
> Whereas, The state of Missouri has an antiquated definition of what a midwife's training and limitation of activity should include;
>
> *Now, Therefore, Be It Resolved*, That the House of Delegates of the Missouri State Medical Association authorize the appointment of a Committee to study midwifery in the light of the joint statement on maternity care issued under the auspices of the American College of Obstetricians and Gynecologists, which recognizes the nurse-midwife as a memher of a medically directed team. This Committee would have as its purpose to define midwifery. After defining nurse-midwifery, they should determine if, in the State of Missouri, a need for such services exists.
>
> Finally, assuming the need for certified nurse-midwives has been determined, and the other aforementioned issues have been dealt with, the Committee would then propose legislation to recognize the practice of nurse-midwifery in Missouri, with the clear understanding that the nurse-midwife will only function as a member of the obstetrical team.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and approved.)

Resolution #30—Federal Drug Administration Regulations

Resolution #30 was introduced by Clay County Medical Society. The Committee listened to much discussion concerning this resolution and concluded that Resolution #30 is too general to be effective. The Committee recommends disapproval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

Mr. Speaker, I move the adoption of this report as a whole.

(The motion was seconded and passed.)

The Speaker invited Dr. M. D. Bonebrake, Chairman, to present the report of the Reference Committee on Reports of Officers.

REPORTS OF OFFICERS

The Reference Committee on Reports of Officers met in the Coach Room of the Chase-Park Plaza Hotel at 4 PM on Thursday, March 29, 1973, with all members present. The remarks of the President, Walter T. Gunn, M.D.; the President-Elect, E. A. Stricker, M.D.; and the President of the Woman's Auxiliary to the Missouri State Medical Association, Mrs. Keith Jones, were accepted and recommended for approval.

The Committee recommends approval of the reports of the Secretary, Treasurer, Executive Secretary, Committee on Planning and Committee on Publications.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and approved.)

The report of the Treasurer was examined and accepted. A surplus of $18,191.85 was noted. The Committee has directed the Chairman to congratulate those responsible for having a balanced budget while, at the same time, engaging in the purchase and renovation of new Association quarters.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

Those portions of the Council's minutes referred to this Committee, covering the Council Meetings of April 8, 1972; June 3-4, 1972; September 16-17, 1972; December 9-10, 1972; and February 2-3, 1973, were reviewed.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

The portion of the **Supplemental Reports of the Council**, as read on the floor of the House of Delegates by Dr. James C. Cope, referred to this Committee, were approved with the proviso that the portion of the report concerning the Pension Fund for MSMA employees be changed to read, "That discrimination on the basis of sex be removed."

The Committee recommends approval of this portion of the Supplemental Report of the Council.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and approved.)

Resolution #20—Educational Money for MMPAC

Resolution #20, which was introduced by Dr. Hubert A. Ritter, was approved with the provision that in the resolution, an additional sentence be added to read as follows:

> The amount of money disbursed for this purpose will he at the discretion of the Council.

Mr. Speaker, I move that this portion of the report be accepted.

(The motion was seconded and carried.)

Mr. Speaker, I move the adoption of this report as a whole.

(The motion was seconded and passed.)

The Speaker invited Dr. T. Eugene Ruff, Chairman, to present the report of the Reference Committee on Necrology.

NECROLOGY

The Reference Committee on Necrology met in the English Room of the Chase-Park Plaza Hotel on March 29, 1973.

The Reference Committee on Necrology of the Missouri State Medical Association regretfully reports that since the 1972 Annual Session, there have been 57 deaths among members whose names are attached to this report.

Each of these members is missed as an individual and for his contributions to the practice of medicine and the Missouri State Medical Association. The loss of each member is keenly felt by our individual members, his loved ones and close associates, and, we are confident, the patients he has served with dedication.

Condolences in the form of a tribute have been sent to the immediate family of each deceased member, and this expression will continue to be sent in the future.

With these thoughts in mind, the Necrology Committee offers the following resolution:

Be It Resolved, That the House of Delegates now stand for a moment of silence and prayer to pay personal tribute and to honor the memory of the 57 members we have lost this past year and whose names will be recorded in the minutes of this Annual Session.

Be It Further Resolved, That this moment of quiet and meditation will serve as a time of our individual rededication to our purpose in the ministry of medicine as we honor the names and unselfish devotion of all departed members of the Missouri State Medical Association, and

Be It Further Resolved, That we emulate their examples and praise God for good men and women.

Mr. Speaker, I move that the report of the Reference Committee on Necrology be approved.

(The motion to adopt the report was seconded and the Speaker asked the House of Delegates to stand for a moment of silence as indication of approval of the motion.)

Members Deceased Since the 1972 Session

Bruce, Paul C., Excelsior Springs
Will, Leo A., Venice, Fla.
Haynes, Robert C., Marshall
Battersby, Richard S., Columbia
Bawell, Malcolm B., St. Louis
Millikin, Lester A., St. Louis
Chamberlain, Gilbert L., Boonville
Scott, Wendell G., St. Louis
Coldwater, Kenneth B., St. Louis
Crews, Robert N., Fulton
Coughlin, Bertrand D., St. Louis
Laney, Ronald L., Carlsbad, California
Grueb, Paul M., St. Louis
Davis, Robert C., Kansas City
Rogers, C. H., St. Louis
Burford, Cyrus E., St. Louis
Reilly, Pierce J., St. Louis
Smith, Carl C., Moberly
Gantt, Ernest S., Jr., Mexico
Carr, G. Thomas, St. Louis
Moore, Carl V., St. Louis
McKnelly, William V., Jefferson City
Waters, E. B., Defiance
Merklin, Anton L., St. Louis
Fulkerson, Wilbur E., Higginsville
Jorstad, Louis H., St. Louis
Robinson, G. Wilse, Jr., Kansas City
Schattyn, John M. T., St. Louis
Smith, Robert S., St. Louis
O'Brien, James A., Joplin
Owens, Graham J., Kansas City
Hoard, Joseph W., Webster Groves
Noah, Joseph W., St. Louis
Kurth, Robert K., St. Louis
Wiese, Harry W., St. Louis
Barden, Frank W., Creve Coeur
Heyer, Oscar C., St. Louis
Francka, W. Frank, Hannibal
Duden, Charles W., St. Louis
Fleming, Paul D., St. Louis
Magidson, Joseph, Clayton
Pollack, Maxwell A., Chesterfield
Pallett, Harold A., Kansas City
Hoffman, R. Lee, Olathe, Kans.
Pfuetze, Edwin L., Kansas City
Terrill, Robert S., Kansas City
Macon, William L., Jr., St. Louis
Carmichael, Francis A., Jr., Shawnee Mission, Kans.
Hammond, John J., St. Louis
Vermillion, Crofford O., St. Louis
Glynn, Robert R., Springfield
Ciampa, Thomas, St. Louis
Dill, Foster A., St. Louis
Klein, Andrew G., St. Louis
Moore, William E., Normandy
Cowherd, Joseph, Kansas City
MacBryde, Cyril M., St. Louis

The Speaker invited new business.

Introduction of New Business

Dr. Joseph Edwards of St. Louis introduced the following resolution:

Endorsement of the American Physiological Society Request for a Commemorative Stamp Honoring William Beaumont, M.D.

Whereas, William Beaumont, M.D., was hailed as the first great American physiologist for his pioneering experiments in the physiology of digestion, which forms the basis of our present day knowledge of the digestive process, while practicing in St. Louis, Missouri between 1833 and his death in 1853, and

Whereas, Dr. Beaumont's study and examination of his patient, Alexis St. Martin, led to his international acclaim for scientific achievement and his recognition as one of the great men of American Medicine; in recognition of his outstanding contribution to knowledge and in tribute to his memory, the physicians of St. Louis in 1964 opened a Medical Historical Museum in St. Louis with a life-size diorama describing his work, which is rapidly earning the reputation of "the country's most significant medical museum" and

Whereas, Dr. Beaumont was the Post Surgeon at Fort Michilimackinac on Mackinac Island, Michigan, in 1822 when he recognized his opportunity for research, which has exerted a profound influence upon generations of medical thought, and

Whereas, The medical societies of Connecticut, where Dr. Beaumont was born; Vermont, where he was first licensed to practice medicine; Michigan, where he began his treatment of the patient and his study; Wisconsin, where he continued his research begun in Michigan and Missouri, and where he became a leader among his contemporaries and world-famous for the contribution to medical science through his teaching and writing and where he died and is buried, are jointly engaged in an effort to further honor the name and memory of William Beaumont, M.D., now, therefore, be it

Resolved, That the House of Delegates of the Missouri State Medical Association join the cooperative efforts of the American Physiological Society to petition and urge the Postmaster General of the United States to issue a commemorative postage stamp honoring William Beaumont, M.D., on the 75th Anniversary of the Publication of the *Journal of Physiology* (1898-1973).

(The motion to adopt the resolution was seconded and approved.)

Dr. R. Bruce McCloskey reintroduced the following resolution:

Resolution #31—PSRO

Whereas, It is apparent that progressively, rules and regulations which have been the unwritten codes for medical practice and are being reduced to written, enforceable law, and

Whereas, The inevitable twin of written regulations is an enforcement agency, and

Whereas, Such enforcement agencies will, necessarily, be endowed with increasing authority, and

Whereas, The American tradition is based upon a philosophy that the powers of authority be delegated to those who exercise them by those over whom the authority is to be exercised, and

Whereas, Such powers will be reposited in such persons for a limited term, following which they must stand for reelection,

Therefore, Be It Resolved, That any authoritative organization that may be developed to regulate or administer a PSRO be elected locally by the physicians over whom they shall have authority, and must stand for reelection each four years,

And Be It Further Resolved, That if and when such an organization be formed one half be elected for two years and one half for four years, following which all shall be elected for four-year terms.

(Referred to the Reference Committee on Resolutions.)

Dr. Donald E. Kuenzi, Clay County Medical Society, introduced the following resolution:

Resolution #33—Introduction of Resolutions

WHEREAS, At the 112th Annual Session, MSMA, a resolution was introduced whicb would require all resolutions considered by the House of Delegates to be submitted at the Association Office 45 days prior to the opening session of the House, and printed in be Handbook; and

WHEREAS, This resolution was referred to the Committee on Constitution and Bylaws; and

WHEREAS, The Committee on Constitution and Bylaws, recognizing tbe good sense of this concept, recommended that the House adopt tbe following policy concerning the introduction of resolutions:

> All resolutions to appear in tbe Handbook must be received at tbe Association Office 45 days prior to the opening session of the House. Any resolutions to be introduced after that time must be made available to the House of Delegates 24 bours before the session at whicb it is to be introduced. At least 200 copies of the resolution or funding for same must be supplied by tbe individual or society introducing the resolution. At tbe second session of tbe House of Delegates, the same procedure would be followed, but sucb introduction would be allowed only if approved by two tbirds of the delegates voting. The same procedure would be followed for the third session, but, at that time, it would take unanimous vote of the House to allow such introduction; and

WHEREAS, At the opening session of the House of Delegates of the 114tb Annual Session this policy, duly adopted by the House of Delegates of tbe 113th Annual Session, was suspended by the Speaker of the House; and

WHEREAS, 18 impromptu resolutions were presented at the 114tb Opening Session, many of which did not qualify under the above policy statement, thereby burdening the delegates to this session with resolutions to wbich neitber they nor their constituents ould give prior consideration; and

WHEREAS, It would seem, from our experience, yesterday at the opening session March 29, 1973, that this policy concept needs the force of a Bylaw so that it can be depended upon by tbe delegates of this Association in future years;

Now, Be It, Therefore, Resolved, That the House of Delegates, n accordance with Article XI, Constitution, MSMA, amend the Bylaws of MSMA, Chapter III, Section I, to follow tbe sentence

> "It sball remain in continuous session on the first day of the Annual Session and complete the work coming before it at that session."
>
> "All resolutions to be considered by tbe House of Delegates must be received at the Association Office 45 days prior to the opening session of the House for publication in the Handbook. Any resolutions to be introduced after that time must be made available to the House of Delegates 24 hours before tbe session at wbich it is to be introduced. At least 200 copies of the resolution, or funding for same, must be supplied by the individual or society introducing the resolution.
>
> "At the second session of the House of Delegates, the same procedure would be followed, but sucb introduction would be allowed only if approved by two thirds of the delegates voting. The same procedure would be followed by the third session, but, at that time, it would take a unanimous vote of the House to allow such introduction. At the discretion of the Speaker, these conditions would not apply for resolutions of good wishes, condolences, congratulations and other personal topics."

(Referred to Reference Committee on Constitution and Bylaws.)

Dr. Patrick C. Hogan, St. Louis Medical Society, introduced the following resolution:

Resolution #34—Scientific Definition of Beginning of Life in the Human

WHEREAS, The criteria for life, that is, growth, motion, metabolc activity and cell division, exist from conception, that is, fertilization of the ovum by a spermatozoon, and

WHEREAS, The same criteria exists with tbe implanted fertilized ovum, be it, therefore,

Resolved, That in the opinion of the Missouri State Medical Association, buman life begins with conception and sustained life begins with implantation of the fertilized ovum, and, be it further

Resolved, That tbe Missouri State Legislature be notified of this definition.

(Referred to Reference Committee on Miscellaneous Affairs.)

There being no further business, the Speaker adourned the Second Session of the House of Delegates with the announcement that the Annual Meeting of the Missouri State Medical Foundation would be held immediately following adjournment.

THIRD SESSION
Sunday, April 1, 1973

The Third Session of the MSMA 115th House of Delegates was called to order by the Speaker, Dr. E. D. Imes, at 7:30 AM in the Khorassan Room of the Chase-Park Plaza Hotel.

In the absence of Dr. Pennington, Chairman, Dr. George Lytton gave the report of the Credentials Committee and declared the presence of a quorum. With unanimous consent, the Speaker dispensed with a roll call and the reading of the minutes of the two previous meetings.

Dr. Donald Judd, Chairman of the Nominating Committee, was invited to present the report of his committee.

NOMINATING COMMITTEE

The Nominating Committee met in this room at the close of our Second Session on Friday. Present at the meeting were Dr. Chris Fotopolous, First District; Dr. Donald Judd, Third District; Dr. Walter Stelmach, Seventh District; Dr. William M. Walker, Eighth District; Dr. Billy J. Bass, Ninth District; and Dr. Melvin Kasten, Tenth District.

The Committee presents the following slate of officers for approval by the Association:

Vice-President—Dr. Rae W. Froelich, Lebanon
Vice-President—Dr. R. Lee Cooper, Warrensburg
Vice-President—Dr. Robert W. Kelley, St. Louis
AMA Delegate—Hector W. Benoit, Jr., Kansas City
AMA Alternate Delegate—Dr. Hugh E. Stephenson, Jr., Columbia
AMA Delegate—Dr. Hubert A. Ritter, St. Louis
AMA Alternate Delegate—Dr. Lawrence W. O'Neal, St. Louis
Speaker of the House—Dr. Robert A. Slickman, Kansas City
Vice-Speaker of the House—Dr. James T. Brown, Springfield

Mr. Speaker, I move the adoption of this portion of the report.

The Speaker invited additional nominations from the floor. Hearing none, he entertained a motion that the nominations cease and that a unanimous ballot be cast for the slate as presented by the Nominating Committee.

(The motion was seconded and approved.)

At this time, the Speaker invited nominations for the office of President-Elect. Dr. Hugh E. Stephenson, Jr. of Columbia nominated Dr. James C. Cope of Columbia. The nomination was seconded by Dr. T. Eugene Ruff of Poplar Bluff. A Delegate moved that nominations cease and that Dr. Cope be elected by acclamation. The motion was seconded and approved.

The new President-Elect was escorted to the Speaker's stand where he made a brief acceptance statement.

Dr. John I. Matthews, Secretary, announced that the following Councilors had been elected for two-year terms:

Dr. Lysle M. Bach, Second District
Dr. Louis P. Hetlage, Fourth District
Dr. William D. Bradshaw, Sixth District
Dr. Howard J. McAlhany, Eighth District

Dr. Eugene T. Hansbrough, Tenth District

The Speaker then called for additional reports of reference committees.

Dr. Robert Felix, Chairman, was invited to present the additional report of the Reference Committee on Constitution and Bylaws.

CONSTITUTION AND BYLAWS

Resolution #33—Introduction of Resolutions

The Committee on Constitution and Bylaws met at 6:50 PM on March 30, 1973, to consider Resolution #33, which was referred to it at the Second Session of the House of Delegates. After considering the resolution, it is recommended that Chapter III, Section 1 of the Bylaws be amended by inserting at the end of the second sentence thereof, the following, which is to replace the third sentence. That last is not in the written report, but should have been, which is to replace the third sentence. It would then read as follows:

> The House of Delegates shall meet annually at the time and place of the annual session. It shall remain in continuous session on the first day of the Annual Session and complete the work coming before it at that session.

Now, this is the insertion which is to replace the third sentence as previously indicated:

> All resolutions to be considered by the House of Delegates must be received at the Association Office 45 days prior to the opening session of the House for publication in the Handbook. Any resolution to be introduced after that time must be made available to the House of Delegates 24 hours before the session in which it is to be introduced. At least 200 copies of the resolution, or funding for same, must be supplied by the individual or society introducing the resolution.
>
> At the Second Session of the House of Delegates, the same procedure would be followed, but such introduction would be allowed only if approved by two thirds of the Delegates voting. It (the House of Delegates) shall meet on the last day of the Annual Session to receive the report of the Nominating Committee and to complete unfinished business and the election of officers. The same procedure with regard to resolutions would be followed at that session, but it would then take a unanimous vote of the House to allow such introduction. At the discretion of the Speaker, these conditions would not apply for Resolutions of good wishes, condolences, congratulations, and others of a personal nature.

Then the last sentence of Chapter III, Section 1 of the Bylaws will remain as it is now, as follows:

> No new business shall be introduced at the last session without the unanimous consent of the Delegates.

Mr. Speaker, I move the adoption of this report.

(The motion was seconded. There was discussion. Dr. John C. Soucy moved to amend the second sentence of Resolution #33 to read as follows:

> Must be postmarked 45 days prior to the opening session.

Dr. Soucy's motion was not seconded. After further discussion, the Speaker called for a standing vote on the motion to adopt this report. The Committee Report was approved by a two-thirds majority.)

The Speaker invited Dr. Robert Mayer, Chairman, to present the additional report of the Reference Committee on Resolutions.

RESOLUTIONS

The Reference Committee on Resolutions met immediately following the House of Delegates session in the Khorassan Room on Friday afternoon.

Resolution #31—PSRO

With reference to Resolution #31, which was presented by Dr. Bruce McCloskey, in lieu of the previous presentation, the Committee recommends that the House of Delegates disapproves this resolution.

Mr. Speaker, I move the adoption of this report.

(The motion was seconded. After discussion the motion to adopt the Committee report which disapproved Resolution #31 was defeated.

At this time, Dr. McCloskey moved the adoption of Resolution #31. After discussion, Dr. Edwin Burford moved that Resolution #31 be tabled for further study. Dr. Burford's motion was seconded and carried.)

The Speaker invited Dr. Andrew McCanse, Chairman, to present the additional report of the Reference Committee on Medical Education and Public Welfare.

MEDICAL EDUCATION AND PUBLIC WELFARE

Dr. McCanse stated that this Reference Committee did not have an additional report.

The Speaker invited Dr. Thomas M. Macdonnell to present the additional report of the Reference Committee on Miscellaneous Affairs.

MISCELLANEOUS AFFAIRS

(As a member of this Reference Committee, Dr. Macdonnell commended members of the House of Delegates for the 115th Annual Session for expressing their majority opinion. In the absence of the Chairman, Dr. E. Warren Allen, he then yielded the floor to Dr. Joseph V. Vacca, also a member of the Reference Committee, who presented the additional report.)

The Reference Committee on Miscellaneous Affairs convened in a second session in the Coach Room of the Chase-Park Plaza Hotel on Friday, March 30, 1973. The Chair assigned four resolutions to this Committee for consideration. These resolutions are to be considered by the House of Delegates on Sunday, April 1, 1973. All members of the Committee were present.

Resolution #16—Official Declaration of Death

The Committee reviewed Resolution #16 which was submitted by Dr. B. F. Byland, President, Northwest Missouri Medical Society. The Committee recommends disapproval of Resolution #16 as written. The consensus of opinion of the Committee members on this subject matter was that there was a question of the correctness of the premise that a physician must see the patient to pronounce him dead. It was felt that this could best be handled by local custom.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and carried.)

Resolution #28—Quality Assurance Program (QAP)

The Committee reviewed Resolution #28. We recommend that no action be taken on this resolution at this time. The reason for this recommendation is as follows: Within 60 to 90 days, Dr. Ladyman, a member of a Missouri State Medical Commission, will be attending a meeting pertaining to this proposal. We recommend that his report be given to the Council for consideration, and that the Council acts on this by reporting to the House of Delegates at the next Annual Session.

Mr. Speaker, I move the adoption of this portion of he report.

(The motion was seconded and carried unanimously.)

Revised Resolution #32—Blue Shield and Blue Cross Regulations

The Committee reviewed Resolution #32. With your permission, I would delete the next paragraph from reading it and merely state that we struck all reference to he Blues, other than Missouri Medical Service, from the original resolution and, then, recommend adoption of the evised Resolution #32, which is as follows, beginning t the bottom of Page 1 of the report:

WHEREAS, The Senate and House of Representatives of the General Assembly of the state of Missouri are now considering ertain proposed legislation for the regulation of health service orporations, which affects Missouri Medical Service, and

WHEREAS, Missouri Medical Service (the St. Louis Blue Shield Plan) has been sponsored by this Association, and

WHEREAS, Such proposed legislation seeks to establish a system of administrative regulation which is unnecessary in view of the xisting safeguards already protecting the members of Missouri Medical Service, and

WHEREAS, Such proposed legislation established cumbersome administrative procedures which will make it difficult or impossible or Missouri Medical Service to adapt and extend their plans and ervices to meet the needs of their members, and

WHEREAS, Such proposed regulation jeopardizes the corporate tructure and tax-exempt status of Missouri Medical Service, and

WHEREAS, Such proposed legislation, if put into effect, must necessarily result in an increase in the cost of the operation of Missouri Medical Service, which can only be met by an increase n the dues paid by the members, and

WHEREAS, It is not in the best interest of the people of the state of Missouri, including the more than 950,000 members and their dependents of Missouri Medical Service, to increase the cost and decrease the services offered by Missouri Medical Service, therefore, be it

Resolved, That this Association opposes the enactment of all egislation affecting Missouri Medical Service now pending in the General Assembly of the state of Missouri, and

Further Resolved, That the Officers of this Association be directed to transmit this resolution to the Senate and House of Representatives of the General Assembly of the state of Missouri and to such other persons as such Officers deem to be in the best interest of this Association.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded and passed.)

Resolution #34—Scientific Definition of Beginning of Life in the Human

The Committee considered Resolution #34, submitted by Dr. Patrick C. Hogan, St. Louis Medical Society.

After discussion, Resolution #34 was recommended for approval as amended by the deletion of the words "in the human" in the subject matter of this resolution and, also, by the deletion of the word "human" in the second line of the first *Resolved*, thus making Resolution #34 to read as follows:

WHEREAS, The criteria for life, that is, growth, motion, metabolic activity and cell division, exist from conception, that is, fertilization of the ovum by the spermatazoa, and,

WHEREAS, The same criteria exists with the implanted fertilized ovum, be it, therefore,

Resolved, That in the opinion of the Missouri State Medical Association, life begins with conception and sustained life begins with implantation of the fertilized ovum, and, be it further

Resolved, That the Missouri State Legislature be notified of this definition.

Mr. Speaker, I move the adoption of this portion of the report.

(The motion was seconded. Dr. Smith requested permission to submit a minority report and moved that Resolution #34 be tabled. His motion was seconded and defeated. After extensive discussion, the motion to accept this portion of the Committee's report was defeated by a standing vote of 66 to 65.)

Mr. Speaker, I move the adoption of this report as amended.

(The motion was seconded and approved.)

REPORTS OF OFFICERS

The Speaker invited Dr. McDonald Bonebrake, Chairman, to present the additional report of the Reference Committee on Reports of Officers. There was no additional report.

NECROLOGY

The Speaker invited Dr. Eugene T. Ruff, Chairman, to present the additional report of the Reference Committee on Necrology. In the absence of Dr. Ruff, a member of the Committee stated that this Committee had no additional report.

This concluded reports of the Reference committees.

At this time, Mr. Ira Rutkow, Delegate from St. Louis University, made the following statement:

"On behalf of all the recently seated Delegates from the four medical schools throughout the state of Missouri, we wish to express our sincerest thanks for our recent seating as voting Delegates in the Missouri State Medical Association's House of Delegates and, by doing so, giving us the opportunity to become better acquainted with both the structure and function of organized medicine in the state. We hope this will be a mutually rewarding experience and one in which we will be able to introduce the ideas and viewpoints of our classmates to this august body and, in return, present yours to them. Once again, we thank you and look forward to a very exciting and rewarding year."

Dr. Donald Judd moved to untable the portion of the report of the Reference Committee on Resolutions which referred to the matter of a Missouri Physicians' Guild and had been tabled during the Second Session of the House of Delegates. The portion of the report under consideration is as follows:

"The report of the Ad Hoc Committee for the negotiation of professional fees, January 17, 1973. The report was reviewed by the Committee, followed by extensive discussion of all interested parties. It was the consensus of the Committee that the idea of a physicians' Guild was not the most desirable mechanism at this time for dealing with the socio-economic problems of medicine as they stand today. The Committee strongly urges more aggressive leadership in establishing uniformity of action to protect the traditional rights of patient-physician relationships, et cetera.

"The Committee commends Dr. Stanley Peterson and his Committee for their in depth study of the problem, but feels that an approach through the AMA is more desirable than a physicians' union or Guild, and recommends that Dr. Peterson and his Committee pursue this course of action."

(The motion by Dr. Judd to untable was seconded and defeated.)

Installation of Officers

The Speaker then invited the Officers and Councilors to come to the front of the room where the Association

Dr. R. A. Slickman, Vice-Speaker of the House of Delegates, was elected as Speaker of the House for 1973-1974 and presided at the closing of the Third Session.

Secretary, Dr. John I. Matthews, administered the oath of office.

At this time, Dr. Imes turned the gavel over to the newly-elected Speaker of the House, Dr. Robert Slickman.

There being no further business, the Speaker invited President E. A. Stricker to announce his commission and committee appointments for the 1973-1974 year. Members whose terms had not expired were not mentioned and it is assumed they will continue to serve.

Committee Appointments

Committee on Constitution and Bylaws—R. Stacy Long, Kansas City and Donald Judd, St. Louis (terms to expire in 1976); Miles C. Whitener, St. Louis County, Chairman for 1973-1974.

Committee on Legislative Affairs—John I. Matthews, Jefferson City, Chairman; R. Allen Chandler, Kansas City; James C. Cope, Columbia; Robert E. Bregant, Jefferson City; Lawrence W. O'Neal, St. Louis (one-year terms).

Committee on Planning—T. N. Cofer, Chillicothe and Paul H. Rother, St. Charles (terms to expire in 1978); David N. Kerr, St. Louis, Chairman for 1973-1974.

Committee on Voluntary Health Agencies—Joseph L. Fisher, St. Joseph and Paul S. Quinn, Springfield (terms to expire in 1976); Carl Siegel, Kansas City, to serve the unexpired term of Max E. Teare, Kansas City, to 1975; William C. Allen, Columbia, Chairman for 1973-1974.

Commission Appointments

Commission on Public Affairs—Richard Bowles, Liberty; Byron E. Watts, Jefferson City; Hubert A. Ritter, St. Louis; A. W. Neilson, St. Louis; Richard Sutter, St. Louis County (terms to expire in 1976); Richard Bowles, Liberty, Chairman for 1973-1974.

Commission of Medical Economics, Third Party Medicine and Governmental Relations—Herbert C. Wiegand, St. Louis; Max A. Heeb, Sikeston; Kenneth K. Keown, Columbia; Rae W. Froelich, Lebanon; E. J. Cunningham, Jr., St. Louis County (terms to expire in 1976); Stanley S. Peterson, Springfield, Chairman for 1973-1974.

Commission on Continuing Education and Health Manpower—Andrew McCanse, Kansas City; A. Sherwood Baker, Columbia; Richard J. Dames, St. Louis; John C. Soucy, St. Charles; Charles A. Worley, Sweet Springs (terms to expire in 1976); George H. Ladyman, Poplar Bluff, Chairman for 1973-1974.

Commission of Medical-Legal Affairs—David W. Brown, Springfield; Francis X. Paletta, St. Louis; Frederick J. McCoy, Kansas City; Bernard Draper, Rolla; Robert L. Wilcoxon, Joplin (terms to expire in 1976); Frederick J. McCoy, Kansas City, Chairman for 1973-1974.

Commission on Interspecialty Medicine—(The name of the Representative will be followed by the name of the Alternate.) *Missouri State Surgical Society*, Cyril Costello, St. Louis and William Van Buskirk, Kansas City; *St. Louis Society of Neurological Sciences*, Herbert E. Rosenbaum, St. Louis and E. Robert Schultz, St. Louis; *Missouri Ophthalmological Society, Inc.*, Truman Schertz, North Kansas City and H. Berry Ivy, Springfield; *Missouri Society of Internal Medicine*, Hugh R. Waters, St. Louis and William Ames, St. Joseph; *Missouri Psychiatric Association*, George J. Lytton, Kansas City and James Haddock, St. Louis; *Missouri Chapter, American Academy of Pediatrics*, Francis X. Lieb, St. Louis and Don S. Overend, Springfield; *Missouri State Society of Neurological Surgeons*, William S. Coxe, St. Louis and August W. Geise, Jr., St. Louis; *Missouri State Allergy Association*, James W. Willoughby, Kansas City and William T. K. Bryan, St. Louis; *Missouri Dermatological Society, Inc.*, Norman Asel, Columbia and Bruce V. Drowns, Kansas City; *Physical Medicine and Rehabilitation*, Robert W. Allen, Columbia and Franz U. Steinberg, St. Louis; *Missouri OB-GYN Society*, William Walker, Springfield and B. J. McGinnis, St. Louis; *Missouri Chapter, American College of Surgeons*, G. Lynn Krause, St. Louis; *Missouri Ear, Nose and Throat Association, Inc.*, Robert M. Hazen, Kansas City and W. Joel Wurster, Kansas City; *Missouri Pathology Society*, Henry C. Allen, St. Louis and David L. Zacharias, Kansas City; *Missouri Radiological Society*, George P. Wilson, Columbia and Byron E. Watts, Jefferson City; *Federation of Missouri Urologists*, Larry G. Markel, Kansas City; *Missouri Society of Anesthesiologists*, Edwin Bowe, Jefferson City and Donald J. Dickler, St. Louis.

The Speaker requested an invitation for the meeting place of the next Annual Session of the Association. On behalf of Jackson County Medical Society, Dr. R. Allen Chandler, Seventh District Councilor, invited the MSMA to hold the 1974 Annual Session in Kansas City. The invitation was accepted.

The Speaker announced that the 116th Annual Session of the Missouri State Medical Association will be held on April 4-7, 1974 at the Crown Center Hotel in Kansas City.

There being no additional business, the Speaker declared the 115th Annual Session adjourned.

REGISTRATION AT THE 115TH ANNUAL SESSION

First Councilor District—33

Allen, E. Warren, Carrollton
Arst, H. E., Kansas City
Baker, Warren C., Savannah
Boone, Daniel C., Kansas City
Bryant, Sydney, St. Joseph
Butler, E. F., St. Joseph
Bowles, Richard P., Liberty
Christ, Martin H., St. Joseph
Conrad, Joseph, Chillicothe
Cross, Albert D., Trenton
Dernoncourt, John E., Smithville
Dixon, John R., Brookfield
Dowell, Donald M., Chillicothe
Fakhoury, Donald A., Kansas City
Fisher, Joseph L., St. Joseph
Fotopoulos, C. K., North Kansas City
Gilliland, C. E., Cameron
Goldberg, I. E. Braymer
Hedges, Richard L., Excelsior Springs
Imes, E. D., Maryville
Jimenez, Jose, St. Joseph
Kuenzi, Donald E., Kansas City
McDaniel, John R., St. Joseph
Martin, John, St. Joseph
Matteson, Frank B., Grant City
Ozenberger, Larry, Plattsburg
Redmond, William, St. Joseph
Rost, William B., St. Joseph
Schertz, T. B., North Kansas City
Sportsman, W. L., Kansas City
Stacy, Winton T., St. Joseph
Wadlow, Ernest E., St. Joseph
Willman, Charles R., St. Joseph

Second Councilor District—13

Bach, Lysle M., Hannibal
Barnett, F. A., Paris
Campbell, James E., Macon
Cohrs, Clarence C., Moberly
Davis, Landis Y., Canton
Fleming, J. Will, Jr., Moberly
Fleming, Thomas S., Moberly
Foreman, Phillip B., Hannibal
Grim, Edward M., Columbia
Harms, F. L., Salisbury
Lewellen, Charles H., Louisiana
Middleton, John W., Louisiana
Plowman, Edward M., Hannibal

Third Councilor District—225

Abalerdo, M. L., Manchester
Acker, H. L., Clayton
Ahadi, Abd Ul Ahad, St. Louis
Allen, William E., Jr., St. Louis
Altheide, J. Paul, St. Louis
Amado-Ledo, David E., St. Louis
Anderson, John M., St. Louis
Anglo, Luis B., St. Louis
Auer, Edward T., St. Louis
Aylward, H. J., St. Louis
Ballinger, W. F., St. Louis
Banton, M. Roman, St. Louis
Baula, Armindo G., St. Louis
Benjamin, Durand, St. Louis
Berry, John W., St. Louis
Biddy, Ralph L., St. Louis
Bigger, John F., St. Louis
Bleisch, Virgil R., St. Louis
Block, Arnold S., St. Louis
Bohigian, George, St. Louis
Boldizar, Albert G., St. Louis
Bourke, Thomas E., St. Louis
Bowen, S. F., Jr., St. Louis
Bowerman, Harold H., St. Louis
Boyarsky, Saul, St. Louis
Bradley, Richard, St. Louis
Brennan, George A., St. Louis
Brookes, Robert D., St. Louis
Bruce, Helen L., St. Louis
Bruns, Kenneth, St. Louis
Bryan, James H., Clayton
Bryan, William T. K., St. Louis
Campbell, Cecil S., St. Louis
Chadaratana, Phadung, St. Louis
Cheuk, Shu-sum, St. Louis
Chipongian, Raul A., St. Louis
Choo, Yen Pinc, Koch
Claseman, Wilma, St. Louis
Colosi, Nicholas J., St. Louis
Cooper, T. J., St. Louis
Costello, Cyril, St. Louis
Costello, Joseph P., St. Louis
Criscione, James S., Kirkwood
Danis, Richard K., St. Louis
de Ungria, Pablo C., St. Louis
Dodge, Philip R., St. Louis
Dorton, Robert K., St. Louis
Doyle, Charles R., St. Louis
Drescher, Emmett B., St. Louis
Drews, Robert C., Clayton
Dzundzev, Penco T., St. Louis
Edwards, Joseph C., St. Louis
Ernst, Edwin C., St. Louis
Etienne, Robert B., St. Louis
Fabian, L. W., St. Louis
Fallon, Richard, St. Louis
Felix, Robert H., St. Louis
Fink, LeRoy L., St. Louis
Finnegan, Joseph V., St. Louis
FitzGerald, Leo P., St. Louis
Fleishman, Alfred, St. Louis
Florendo, P. T., St. Louis
Fox, Robert E., St. Louis
Franklin, Max S., St. Louis
Frawley, Thomas F., St. Louis
Frederick, R. O., St. Louis
Freimuth, L. E., St. Louis
Freund, Samuel J., St. Louis
Friedman, Paul L., St. Louis
Friedrich, Ernst R., St. Louis
Fries, Armand D., St. Louis
Furla, Gus J., Brentwood
Gandlmayer, Jack, St. Louis
Geha, Alexander S., St. Louis
Geise, August W., Jr., St. Louis
Gnade, Albert J., St. Louis
Grebel, Clement B., St. Louis
Guccione, Joseph B., St. Louis
Gulick, Charles R., St. Louis
Gunn, W. T., St. Louis
Hamilton, E. G., St. Louis
Hansel, French K., St. Louis
Hanser, Theodore H., St. Louis
Harell, Alex, St. Louis
Hawk, Bray, St. Louis
Hawkins, George L., Webster Groves
Haynes, J. W., Kirkwood
Heins, James N., St. Louis
Hilbert, Paul H., St. Louis
Hill, XaCadene A., St. Louis
Hironimus, John, St. Louis
Hoffman, Ronald, Clayton
Hofstatter, Leopold, St. Louis
Hogan, Patrick C., St. Louis
Holbrook, Charles K., Hazelwood
Hollo, Vencel W., St. Louis
Holtz, Alan, Kirkwood
Ishida, Yasuo, St. Louis
Johnston, John, Jr., Kirkwood
Jones, Otey S., St. Louis
Jost, Charles, St. Louis
Judd, Donald, St. Louis
Keller, Louis, Clayton
Kelley, Robert W., St. Louis
Kerr, David Nafe, Clayton
King, M. K., St. Louis
Kinsella, Edward D., St. Louis
Kinsella, Ralph A., St. Louis
Kleinschmidt, C., St. Louis
Kneal, Ellsworth, St. Louis
Kolodny, Robert C., St. Louis
Komanetskey, William, St. Louis
Kowert, Edward H., St. Louis
Kramolowsky, Helmuth, St. Louis
Kromer, Charles, St. Louis
Kuczer, Arnoldo, Creve Coeur
Lacson, Leticia, St. Louis
Lane, Clinton W., St. Louis
Langlois, Paul J., St. Louis
Larsen, Virginia L., St. Louis
Lawton, L. M., Creve Coeur
LeBlanc, Leo, St. Louis
Lederman, J., St. Louis
Lewis, Eugene, St. Louis
Liao, Kun T., Creve Coeur
Lieb, Francis X., St. Louis
Littmann, Lewis, St. Louis
Loeb, Virgil, Jr., St. Louis
Longway, Maurice, St. Louis
Lowenstein, Paul A., St. Louis
Luedde, Philip S., St. Louis
McAlister, William H., Brentwood
McCloskey, R. Bruce, St. Louis
McCown, Allan H., St. Louis
Machek, Otakar, St. Louis
Maginn, Reilly, Clayton
Maranan, Diosdado, Kirkwood
Max, Paul F., St. Louis
Merenda, Sam, St. Louis
Miller, Robert N., St. Louis
Milster, Clyde R., St. Louis
Monafo, William, St. Louis
Morris, Mary E., St. Louis
Mueller, Robert, St. Louis
Muether, Raymond O., St. Louis
Neilson, Arthur W., St. Louis
Nolan, Charles J., St. Louis
Oakley, Margaret M., St. Louis
Obermeyer, Charles G., St. Louis
Ognyanov, V. F., St. Louis
Ohmoto, Masai, St. Louis
Olmsted, W. H., St. Louis
O'Neal, L. W., St. Louis
Padilla, Teresita C., St. Louis
Paletta, Theodore L., St. Louis
Parato, John M., St. Louis
Pennington, F. E., St. Louis
Pepper, Max, St. Louis
Pernoud, F. G., St. Louis
Pernoud, Michael F., St. Louis
Pilla, Lawrence A., St. Louis
Plax, Steven, St. Louis
Potter, Reese H., St. Louis
Probstein, J. G., St. Louis
Pruett, B. S., St. Louis
Quick, Richard T., St. Louis
Reich, Harry A., St. Louis
Reyes, Jose T., Frontenac
Rhee, D. S., Des Peres
Roth, John L., St. Louis
Richman, Elmer, Chesterfield
Ritter, H. A., St. Louis
Rosell, Louis V., St. Louis
Rosenbaum, Herbert E., St. Louis
Rosenfeld, Henry, St. Louis
Russell, Herman E., St. Louis
Salanga, P. B., St. Louis
Sanchez, Abe B., St. Louis
Schaan, Robert C., St. Louis
Schengber, John, St. Louis
Schuessler, W., St. Louis
Schwartz, Henry G., St. Louis
Schweiss, John F., St. Louis
Sciortino, John S., St. Louis
Sexton, Daniel L., Clayton
Shah, Anwar, St. Louis
Shaw, Edward J., St. Louis
Sherwin, Charles S., St. Louis
Signorelli, A. J., St. Louis
Simon, Jerome I., St. Louis
Sletten, Ivan, St. Louis
Smith, Dermott, St. Louis
Spalding, Donald G., St. Louis
Staple, Tom W., St. Louis
Steinberg, Franz V., St. Louis
Stergen, N. E., Florissant
Sterkel, Richard L., St. Louis
Sullivan, Clement, St. Louis
Swope, Joseph A., St. Louis
Tess, Allen, Florissant
Thale, Thomas, St. Louis
Thiel, J. Allen, St. Louis
Tichenor, R. W., St. Louis
TjoFlat, O. E., St. Louis
Turney, C. M., St. Louis
Turner, James K., St. Louis
Ulett, George, St. Louis
Vacca, Joseph B., St. Louis
Vaughan, Robert W., St. Louis
Velasco, Ernest T., St. Louis
Wacker, Leo L., St. Louis
Walters, W. H., St. Louis
Weir, Don, St. Louis
Weldon, C. S., St. Louis
Westerman, Robert N., St. Louis
Whittico, James M., St. Louis
Williams, Carol F., St. Louis
Wilson, A. W., St. Louis
Wilson, S. L., St. Louis
Wirthlin, Edward H., St. Louis
Wochner, R. Dean, St. Louis
Woods, Ralph E., St. Louis
Yang, Jae H., St. Louis
Zeffren, J. Lester, St. Louis
Zuckner, Jack, St. Louis

Fourth Councilor District—114

Albano, Benjamin I., Crystal City
Alvarez, Ulises C., St. Louis
Ayvanzian, Vatche, St. Louis
Bagby, J. W., Clayton
Bailey, W. H., St. Louis County
Baker, Donald L., Union
Balster, Vernon H., St. Louis
Barragan, Hector, Ballwin
Berwald, Irvin I., St. Louis
Boles, C. Read, Clayton
Bolinske, Robert E., St. Louis
Bonney, S. C., Washington
Cacioppo, Joseph E., St. Louis
Catanzaro, Rudolph, St. Louis
Carrier, John A., St. Louis
Castro, Juan M., Creve Coeur
Cowdry, E. V., St. Louis
Crawford, Robert M., Sullivan
Creech, J. C., Troy
Damron, Edward O., Elsberry
Davis, Edgar W., St. Louis
Deitchman, Robert B., Clayton
Deles, Vicente D., Crystal City
Del Pizzo, Ferdinand, Jr., St. Charles
Deutch, Max, St. Louis
Dickler, Donald J., St. Louis
Drum, Helen, St. Louis
Duggan, John J., Jr., Kirkwood
Eidelman, Jack R., St. Louis
Emerson, R. L., Brentwood
Estes, J. M., St. Louis
Fingerhood, M. G., Olivette
Finkel, B. W., Jennings
Fish, R. Graham, St. Louis
Fishman, John, Chesterfield
Floro, Mariano N., Jr., Florissant
Freiheit, H. J., St. Louis
Gaines, Quentin M., Kirkwood
Gearhart, Wilbur H., St. Louis
Gollub, Samuel W., St. Louis
Goodman, Nathaniel, St. Louis
Hagemann, Paul, St. Louis
Hallazgo, S. Y., Kirkwood
Hammes, R. E., St. Charles
Hershey, Falls B., Clayton
Hetlage, L. P., Troy
Hughes, Robert G., St. Louis
Izmirlian, Grant, Creve Coeur
Judge, Walter T., Crystal City
Kabir, M. A., St. Louis
Kendig, Joseph B., St. Louis
King, E. E., Ferguson
Klippel, Allen P., St. Louis
Kopp, Jules H., St. Louis
Kuttner, Marianne, University City
Laird, John M., Jr., Florissant
Levin, Marvin E., St. Louis
Lewin, W. Howard, St. Louis
Linsenmeyer, Charles, St. Charles
Magness, Guy, University City
Marcus, Morris D., St. Louis
Mayer, Robert A., Ballwin
Mayfield, James L., Crystal City
Merz, Jean J., St. Louis

Middleton, Jerry N., St. Louis
Miller, Charles, Kirkwood
Miles, Paul W., St. Louis
Minnihan, Robert W., Chesterfield
Moellenhoff, Robert W., Washington
Montes, Arturo C., St. Louis
Mullarky, Wilbur A., St. Louis
Nakada, James R., Clayton
Park, Agatha, Ferguson
Peterson, Frederick D., St. Louis
Poggemeier, William H., St. Charles
Racadio, Severo M., St. Louis
Rice, Carl E., Crystal City
Richardson, Thomas F., St. Louis
Richardson, William R., Union
Robinson, Edith C., St. Louis
Roblee, Melvin A., St. Louis
Roter, Alex, St. Charles
Rother, Paul H., St. Charles
Ruhling, Rudy, St. Louis
Rutledge, John F., Crystal City
Saha, Sudha, Ballwin
Schaef, Mary L., St. Louis
Schwartz, Melvin, St. Louis
Senn, Emmit J., Herculaneum
Simril, Wayne A., St. Louis
Sisk, James C., St. Louis
Soucy, John C., Jr., St. Charles
Steiner, Jerry, Clayton
Susman, Irvin C., St. Louis
Teiber, Fred W., St. Louis
Tobias, Norman, St. Louis
Tomlinson, William L., St. Louis
Toon, Thomas J., St. Louis
Utlett, Pearl C., St. Louis
Valach, Frank J., St. Louis
Vitale, Anthony J., St. Louis
Vitale, Nicholas S., St. Louis
Walker, Harvey, Jr., Clayton
Weber, Sol, St. Louis
Westerfeld, Roy A., St. Charles
White, Newton B., St. Louis
Whitener, Paul R., St. Ann
Whitener, Miles C., St Louis
Wipfler, Earl J., Jr., St. Charles
Wolff, Ray J., Clayton
Workman, George, Hermann
Wulff, George J. L., Jr., St. Louis
Wyatt, Lois C., Kirkwood
Yap, Mardonio J. R., St. Louis

Fifth Councilor District—65

Allen, Robert W., Columbia
Allen, William C., Columbia
Asel, Norman D., Columbia
Baker, A. Sherwood, Columbia
Bazzoui, W., Columbia
Bloom, W. A., Fayette
Bregant, Robert, Jefferson City
Brukardt, Diane, Columbia
Byland, Samuel J., Wellsville
Cooper, Claude W., Jefferson City
Cope, James C., Columbia
Davis, David, Columbia
Durst, Henry, Fulton
Ekern, H. Peter, Mexico
Exon, C. Stuart, Jefferson City
Fuchs, George J., Jr., Columbia
Garner, Royal S., Jefferson City
Gordon, James S., Jefferson City
Guhleman, Henry V., Jefferson City
Hardwicke, Henry M., Ashland
Hart, William M., Columbia
Hopeman, Alan R., Columbia
Huq, Nasrul, Mexico
Jackson, Vernon B., Fulton
Jolly, Ben N., Mexico
Kanagawa, Harold K., Jefferson City
Kauffman, Ruth, Versailles
Keown, Kenneth, Columbia
Logue, John T., Columbia
Lyle, Ray, Versailles
Matthews, John, Jefferson City
Mayer, William D., Columbia
Meinershagen, Charles W., Jefferson City
Metzgar, Marshall T., Columbia
Mitchell, Frank L., Columbia
Moranville, Benedict A., Columbia
Morgan, Philip E., Columbia
Mullins, Maurice F., Columbia
Nieuwenhuizen, Maarten, Columbia
Pingelton, William B., Columbia
Pugh, Reginald P., Columbia
Ritterbusch, James K., Fulton
Ryan, Thomas J., Jefferson City
Sanders, Jack S., Jefferson City
Schokker, Johannes, Jefferson City
Siu, Kenneth K. C., Jefferson City
Stephenson, Hugh E., Columbia
Stewart, William J., Columbia
Stoy, Robert P., Columbia
Stuart, Byron M., Boonville
Sydow, Henry, Fulton
Tanner, Robert H., Jefferson City
Thomas, Horace E., Columbia
Wakerlin, G. E., Columbia
Wallace, Edward S., Mexico
Walters, John H., Columbia
Walters, Laura, Columbia
Washburn, J. Loren, Versailles
Watson, Trevor F., Columbia
Weiss, James M. A., Columbia
Werth, Joseph A., Jefferson City
Wilson, George P., Columbia
Winn, George W., Boonville
Young, Paul R., Columbia
Ziegler, Anthony, Jr., Vandalia

Sixth Councilor District—26

Blalock, Robert W., Marshall
Boydston, Catherine O., Odessa
Boydston, Wayne, Odessa
Bradshaw, W. D., Clinton
Campbell, Albert, Sedalia
Crayton, Billy G., Waverly
Giesler, D. H., Osceola
Glass, Robert L., Columbia
Hanna, Hugh A., Warrensburg
Hobbs, George H., Warrensburg
Kelling, Jordan, Waverly
Knipschild, Bedford F., Marshall
LaHue, William C., Lexington
Lederer, Charles M., Warrensburg
McBurney, C. Alex, Slater
McCorkle, E. Lee, Marshall
McFadden, Gene A., Waverly
Mou, Bin, Nevada
Raynor, Richard, Marshall
Reid, James A., Marshall
Riley, Charles T., Richmond
Smith, James O., Clinton
Torontow, R. John, Nevada
VanDyke, Elmer, Sedalia
Worley, Charles A., Sweet Springs
Wray, Rolla B., Nevada

Seventh Councilor District—66

Ammatelli, Francis J., Kansas City
Arnold, John, Kansas City
Barelli, Pat A., Kansas City
Bauer, Lafe W., Kansas City
Benoit, Hector W., Jr., Kansas City
Berenson, Sheldon E., Kansas City
Berry, Maxwell, Kansas City
Bryant, T. J., Kansas City
Buhler, Victor B., Kansas City
Case, William F., Kansas City
Chandler, R. A., Kansas City
Crow, Martin L., Kansas City
Curts, Calvin J., Kansas City
Eubank, William R., Kansas City
Fairchild, Robert C., Kansas City
Feist, George V., Kansas City
Fowler, Fred D., Kansas City
Glazer, Melvin L., Kansas City
Goldman, Stanley, Kansas City
Griffith, John A., Kansas City
Haith, Edward E., Kansas City
Hall, Thomas B., Arrow Rock
Herdoiza, Alfonso H., Kansas City
Hollweg, Kenneth C., Kansas City
Hyde, Lawrence L., Kansas City
Johnson, Dallas A., Kansas City
Fuhrman, Donald L., Kansas City
Koontz, Paul, Jr., Kansas City
Lambert, Marian, Kansas City
Landers, Burnell, Kansas City
Lapp, Harry C., Kansas City
Lee, Henry A., Kansas City
Leonidas, John C., Kansas City
Link, Vance E., Independence
Linville, Howard E., Kansas City
Long, R. S., Kansas City
Lytton, George J., Kansas City
McCanse, Andrew, Kansas City
McDonnell, John F., Kansas City
McKeel, Thomas B., Kansas City
McKnelly, William V., Kansas City
McPhee, William R., Kansas City
Mac Gee, Edwin, Kansas City
Martin, Clyde V., Kansas City
Miller, Gerald L., Kansas City
Nickson, Charles E., Jr., Independence
Noback, Richardson K., Kansas City
Ost, Mark, Kansas City
Ozar, Milton B., Kansas City
Peterson, Carl M., Kansas City
Piepergerdes, Larry G., Kansas City
Sauer, Gordon C., Kansas City
Slickman, Robert A., Kansas City
Smith, Othello D., Prairie Village, Kan.
Smith, Wallace B., Independence
Sneid, Philip, Kansas City
Stacey, Wallace R., Independence
Staggs, William A., Kansas City
Steffen, Lawrence F., Kansas City
Stelmach, Walter J., Kansas City
Thomas, Chris Y., Kansas City
Williams, George P., Kansas City
Willoughby, James W., Kansas City
Withers, Orval R., Kansas City
Youll, Donald, Kansas City
Youmans, Ronald A., Kansas City

Eighth Councilor District—54

Anthony, Dallas D., Springfield
Beisner, Don, Springfield
Betz, Richard J., Neosho
Brown, James T., Springfield
Carr, Phillip, Springfield
Chase, Ned B., Joplin
Christianson, Charles S., Mount Vernon
Clary, William F., Springfield
Crain, James W., Branson
Esparrago, Francisco R., Monett
Esther, John, Joplin
Ferguson, John P., Springfield
German, Walter A., Springfield
Glover, Kenneth, Mount Vernon
Hall, David W., Springfield
Hall, Marvin F., Joplin
Hubbard, Sally, Springfield
Huewe, Douglas, Springfield
Isaac, Anita M., Springfield
Ivy, Henry B., Springfield
Johnson, William F., Springfield
Kenney, Roy E., Neosho
Knabb, Arthur H., Springfield
Knabb, Kenneth E., Springfield
Lemmon, George B., Jr., Springfield
Lewis, Noel R., Springfield
Loeb, Richard, Springfield
Lockhart, Charles E., Springfield
Lorenc, Ernest, Springfield
Lurie, Harold H., Springfield
McAlhany, Howard, Springfield
Macdonnell, Thomas M., Marshfield
Neu, Leo T., Springfield
Papp, Sandor D., Joplin
Pence, F. Wendell, Carthage
Peterson, Stanley S., Springfield
Podrecca, Guido, Springfield
Prater, B. G., Springfield
Roper, Stanley D., Ozark
Sauer, Paul E., Springfield
Schmidt, Herbert J., Joplin
Simpson, Emerson L., Springfield
Singleton, Marvin, Joplin
Spalding, David L., Springfield
Sturtevant, Harwood N., Springfield
Sweeney, Thomas P., Springfield
Tarrasch, E. L., Springfield
Tombridge, Thomas L., Springfield
Walker, William M., Springfield
Williams, John W., Springfield
Williams, John W., Jr., Springfield
Wilson, Roy E., Springfield
Wood, George H., Carthage
Wyrsch, L. M., Springfield

Ninth Councilor District—12

Bass, B. J., Salem
Cooper, Claude W., Thayer
Draper, Bernard, Rolla
Elders, Frank A., Cuba
Froelich, R. W., Lebanon
Hammler, Christiana V., St. James
Hasek, James A., Mountain Grove
Myers, James M., Rolla
Pendell, Paul W., Rolla
Smith, C. Franklin, Willow Springs
Stricker, Emil A., St. James
Wall, Joe A., Houston

Tenth Councilor District—40

Ahlvin, Robert C., Sikeston
Appleberry, Charles H., Flat River
Blankenship, Dale M., Cape Girardeau
Burford, Edwin K., Jr., Cape Girardeau
Campbell, Edward D., Cape Girardeau
Carlson, E. C., Poplar Bluff
Chapman, Jean A., Cape Girardeau
Chastain, Charles W., Farmington
Craig, Ronald D., Perryville
Dettmer, Robert F., Ironton
Dunmire, George Q., Kennett
Estes, Albert M., Cape Girardeau
Farmer, Norma, Farmington
Hansbrough, Eugene T., Poplar Bluff
Hardy, Stanton, Desloge
Heeb, Max A., Sikeston
Holcomb, John K., Cape Girardeau
Jung, J. Marshall, Cape Girardeau

Kasten, Melvin C., Cape Girardeau
Kinder, Jim, Cape Girardeau
Ladyman, George, Poplar Bluff
McGinty, Charles P., Cape Girardeau
Page, Jesse W., Sikeston
Peck, Chester R., Kennett
Pontillas, Job B., Perryville
Ramirez, Ricardo M., Poplar Bluff
Rapp, Harold B., Cape Girardeau
Ritter, Raymond A., Cape Girardeau
Ruff, T. Eugene, Poplar Bluff
Shoss, Milton, Cape Girardeau
Silsy, Don J., Springfield
Talbert, Clifford R., Jr., Cape Girardeau
Taylor, Van W., Bonne Terre
Till, Bennie N., Poplar Bluff
Tuma, Arthur T., Poplar Bluff
Turner, Kirby L., Potosi
Urban, E. D., Sikeston
Weeks, George R., Cape Girardeau
Wilson, Charles F., Cape Girardeau
Wolff, Paul, Cape Girardeau

Guest Physicians—77

Ayuh, M., St. Louis
Baldree, C. E., Jr., Belleville, Ill.
Banez, Colita R., St. Louis
Beatty, Michael, Peoria, Ill.
Beechwood, E. C., St. Louis
Bendien, H. H., San Diego, Calif.
Bleisch, Nadya, St. Louis
Burnett, Richard, St. Louis
Chase, Robert A., Stanford, Calif.
Chinavongse, C., St. Louis
Chishti, M. Ishaq, St. Louis
Clemis, J. D., Chicago, Ill.
Cooksey, Jon, Kirkwood
Crouch, Thomas T., Overland Park, Kan.
Cutchavaree, Amnuay, St. Louis
Dedo, Douglas D., Webster Groves
Doerhoff, A. R., Columbia
Danilao, Rodolfo, Columbia
Epstein, Dredwin E., Creve Coeur
Fiets, James A., St. Louis
Goldstein, Bernard, St. Louis
Goodrich, Howard B., Orlando, Fla.
Gotanco, Reynaldo M., Columbia
Graves, D. L., Wakita, Okla.
Griffith, John K., St. Louis
Guyer, Emily W., Columbia
Hagen, Garrett, St. Louis
Hale, Ralph, Wichita, Kan.
Hashemi, M., St. Louis
Hashemi, M. J., St. Louis
Henzel, John H., Columbia
Hew, William C., Leesburg, Fla.
Hildebrand, W. B., Neenah, Wis.
Jones, James D., St. Louis
Justus, Bill, Pleasanton, Kan.
Kough, M., St. Louis
Koyua, Francis, St. Louis
Krattya, M., St. Louis
Krueger, Joseph L., Columbia
Lindeman, John F., St. Louis
Little, D. B., West Hartford, Conn.
Lubowitz, Herbert, St. Louis
McCurry, J., St. Louis
Maher, John F., Columbia
Mendoza, G., St. Louis
Minor, Don, Columbia
Mussell, Howard, Ashland
Nagi, Kamal, Ballwin
Nicholas, W. Kirt, Columbia
Odita, John, St. Louis
O'Kane, Hugh, St. Louis
Oliver, G. C., St. Louis
O'Nan, Walter L., Henderson, Ky.
Pollard, W. R., El Paso, Tex.
Reed, Leslie, Granite City, Ill.
Rietman, H. Jerome, Evansville, Ind.
Rosenow, E. C., Philadelphia, Pa.
Sammons, J. H., Baytown, Tex.
Schmidt, Marvin E., Canton, Ill.
Shackelford, Gary D., St. Louis
Shambaugh, George E., Jr., Chicago, Ill.
Sherman, Henry K., Pittsburgh, Pa.
Shingleton, William W., Durham, N. C.
Slavin, Raymond G., St. Louis
Soheir, E. Toumi, Creve Coeur
Standard, Peter J., Columbia
Sunwoo, In Sook, St. Louis
Tabesh, Ahmad, St. Louis
Thawley, Stan, St. Louis
Thompson, Jesse E., Dallas, Tex.
Uhde, George I., Louisville, Ky.
Umali, Erlinda R., St. Louis
Umali, Nora C., St. Louis
Williams, Maybelle P., Alton, Ill.
Williams, Warren S., Tucson, Ariz.
Wolff, Dolores P., Clayton
Zacharewicz, F. A., St. Louis

There were 648 members, 77 guest physicians, 121 exhibitors, 150 Woman's Auxiliary members, 93 guests registered and 9 staff members. Total registration was 1,098.

115TH ANNUAL SESSION EXHIBITORS

American Cancer Society, Missouri Division, Inc., St. Louis
American Medical Facilities Corp., Hazelwood
AMPAC-MMPAC
Astra Pharmaceutical Products, Inc., Worcester, Mass.
Ayerst Laboratories, New York, N. Y.
Blue Cross-Blue Shield, St. Louis-Kansas City
Bristol Laboratories, Syracuse, N. Y.
Bush Office & Sound Systems, Inc., Neosho
Casualty Indemnity Exchange, Denver, Colo.
Clinical Laboratories of St. Louis, Inc., Creve Coeur
Coca-Cola USA, Chicago, Ill.
Committee to Combat Huntington's Disease, St. Louis
Data Service Agency, Inc., Maryland Heights
Diamondhead Corporation, Kirkwood
Dictaphone Corporation, Rye, N. Y.
The Doyle Pharmaceutical Company, Minneapolis, Minn.
Encyclopaedia Britannica, Inc., Chicago, Ill.
Health Education Programs, Inc., Denver, Colo.
Hoechst Pharmaceuticals, Inc., Somerville, N. J.
Homemakers International Company, St. Louis
Lakeside Laboratories, Inc., Milwaukee, Wis.
Lever Brothers Co., New York, N. Y.
The Medical Protective Company, Fort Wayne, Ind.
Medserco, Incorporated, St. Louis
Missouri Heart Association, Inc., Columbia
MSMA Woman's Auxiliary Hospitality Booth
Munns Medcial Supply Co., Inc., Topeka, Kan.
North American Pharmacal, Dearborn, Mich.
North American Services, Inc., Granite City, Ill.
Pitney Bowes, Inc., St. Louis
Publishers Service Center, Longview, Tex.
Rowell Laboratories, Inc., Baudette, Minn.
Sandoz Pharmaceuticals, East Hanover, N. J.
W. B. Saunders Company, Philadelphia, Pa.
G. D. Searle & Co., Chicago, Ill.
Missouri Seven-Up Bottlers, St. Louis
E. R. Squibb & Sons, Inc., Princeton, N. J.
Stuart Pharmaceuticals/Division of ICI America Inc., Wilmington, Del.
United Medical Equipment Co., Kansas City
Vitalograph Medical Instrumentation, Kansas City

In lieu of exhibits, the following firms made cash donations to assist in the sponsorship of Scientific Sessions:

Geigy Pharmaceuticals, Ardsley, N. Y.
Eli Lilly and Company, Indianapolis, Ind.
Merck Sharp & Dohme, West Point, Pa.

Missouri State Medical Foundation

Minutes of the Annual Meeting
Chase-Park Plaza Hotel
Friday, March 30, 1973

The meeting was called to order by Byron M. Stuart, M.D., President. A quorum was declared present. Dr. Stuart stated that the minutes of the 1972 Annual Meeting in Kansas City, which immediately followed the Friday afternoon, April 7 Session of the MSMA House of Delegates, had been published in the July, 1972 issue of Missouri Medicine. It was moved and seconded that the minutes of the 1972 meeting be approved as published. The motion carried.

Dr. Stuart directed attention to the financial statement of the Foundation as of Dec. 31, 1972, a copy of which was offered to those in attendance and which reads as follows:

FINANCIAL STATEMENT FOR THE YEAR 1972

LENNERTSON & COMPANY
Certified Public Accountants
ST. LOUIS, MISSOURI 63105

January 27, 1973

Missouri State Medical Foundation
515 East High Street
Jefferson City, Missouri 65101

Gentlemen:

The Balance Sheet of the Missouri State Medical Foundation, a nonprofit Missouri corporation, was examined for the year 1972. The Balance Sheet at December 31, 1972 is on a cash basis and the additions for the year are set forth in Exhibit A.

Recorded receipts for the year were traced in total into the bank account as deposits and paid checks were seen for the disbursements. A direct confirmation was received from the depository in verification of the cash balances on deposit.

A summary of the loans to medical students follows:

Loans Receivable January 1, 1972	$367,844.37
Loans made during the year	70,750.00
Total	$438,594.37
Less Loan Repayments	17,540.87
Loans Receivable December 31, 1972	$421,053.50

Positive confirmations were mailed as of August 31, 1972 by the Foundation on 226 individual loans which we had received positive confirmation in 1971. On 53 new loans and 10 loans not previously confirmed we mailed positive confirmations with requests to return the confirmations direct to the auditors. Of the 289 loans, 274 were confirmed for a total of $406,816.08 out of total loans of $421,053.50. No additional loans were made after August 31, 1972. Interest income on loans is recorded on a cash basis and the amount received in 1972 was $5,154.57. Accrued interest on outstanding loans at December 31, 1972 amounted to $32,221.46 and is not included in the loan balances in Exhibit A.

Interest received on the savings account and the certificate of deposit amounted to $1,753.28. The certificate of deposit due January 6, 1973 was renewed for six months and interest of $477.08 was received on that date.

The Foundation received a check on January 11, 1973 in the amount of $15,000.00 from the Dr. Richard S. Battersby Estate which represents a partial distribution of the bequest to the Foundation. It is anticipated that the Foundation will receive a total of $28,000.00 and the contribution will be recorded in the year received.

The Missouri State Medical Foundation paid expenses for the year ended December 31, 1972 as follows:

State Registration Fee	$ 1.0
Professional Fees	965.0
Surety Bond	52.6
Printing	170.2
Total	$1,188.8

Missouri State Medical Association had paid these expenses in prior years and continues to subsidize some of the Foundation expenses.

U. S. Treasury Department form 990 and Schedule A will be prepared for the year 1972 and are due for filing by May 15, 1973. The Foundation is not liable for Federal Income Taxes as it is classified as a Tax Exempt Charitable Organization. A refund claim has been filed for $216.16 taxes paid for the year 1970.

MISSOURI STATE MEDICAL FOUNDATION

Balance on hand, 12-31-72		$26,540.40
Income—January 1973		1,156.13
Transferred to Checking from Savings		11,000.00
		$38,696.53
January loans 1973 (Spring) (Number of loans—62)		36,650.00
		$ 2,046.53
Cash on hand 1-31-73		
Checking account	$ 2,046.53	
Savings account	10,978.52	
Certificate of Deposit	19,083.51	
Certificate of Deposit (Battersby Estate)	15,000.00	
Total cash on hand 1-31-73		$47,108.56

We have examined the Balance Sheet of Missouri State Medical Foundation as of December 31, 1972, prepared on the cash basis. The examination was made in accordance with generally accepted auditing standards and include such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. Since the Balance Sheet is on the cash basis, no opinion is expressed on the attached statement as accrued interest on loans of $32,221.46 and $477.08 of accrued interest on certificate of deposit is not shown.

On September 21, 1971 the Foundation cancelled its life insurance on borrowers and became self-insured.

A reserve for losses on uncollectable loans and unpaid loans of deceased borrowers is being set up on the books at a rate of .05% of the outstanding monthly loan balances. An amount of $619.92 has been set up for 1971 and $2,450.35 for the year ended December 31, 1972. One uncollectable loan in the amount of $670.49 has been charged off against the reserve, leaving a balance of $2,399.78 at the year end. With the exceptions above, the Balance Sheet is prepared on a basis consistent with that of the preceding year.

Yours very truly,
Lennertson & Co.
Certified Public Accountants

Exhibit A

MISSOURI STATE MEDICAL FOUNDATION

Balance Sheet (Cash Basis), December 31, 1972

Assets

Cash in Checking Account	$ 26,540.40
Savings Account	21,501.44
Certificate of Deposit due Jan. 6, 1973	19,083.51
Loans Receivable from Medical Students	420,383.01
Less Reserve for Losses	(2,399.78)
Total Assets	$485,108.58

(Continued on page 508)

MSMA NEWS ROUND-UP

JULY, 1973

egislative Session termed successful

flurry of action during the final two days of 77th Missouri General Assembly resulted in a successful Session for Medicine in Missouri. f the five Senate bills and three House bills ported by the Missouri State Medical Associa- which survived the calendar striking of last th, all were PASSED.

erhaps far more important, none of the bills ch were actively opposed by the MSMA sur- d into the final days of legislative action. In- ed in this group were five House bills and one ate bill.

n his report to the MSMA Council on June 2, John I. Matthews, Legislative Committee irman, said if the Session ended that day (June t would have to be termed a success. At that , all of the MSMA-opposed measures had been oped from further consideration by the General embly.

ut, the Session became even more of a success he MSMA-supported bills were passed in the ing hours.

he MSMA followed, to one degree or another, House bills and 19 Senate bills during the Ses- . MSMA members from all parts of the state vided expert testimony, pro or con, on 18 bills re House Committees and on 13 bills consid- by Senate Committees. Additionally, written port or opposition was supplied on several mea- s.

ourteen bills of direct interest to Missouri sicians were passed during the Session. Most he measures must still be signed by the Gover- before becoming law.

or the first time, Blue Cross and Blue Shield come under regulatory guidelines of the Mis- ri Division of Insurance. The Blues Bill (SB 3) supported by Kansas City Blue Cross and eld and St. Louis Blue Cross. St. Louis Blue eld opposed the bill. The MSMA did not take a ition on the measure until after the 115th An- l Session in St. Louis, March 29-April 1, when House of Delegates passed a Resolution oppos- all bills regulating the Blues.

owever, by the time the House acted, SB 3 had ady been passed in differing versions by the ate on a 33-0 vote and by the House on a 156-3 vote. The compromise version of SB 3 passed in the final hours of the Session on a near unanimous vote.

One bill which has already been signed by the Governor removes smallpox from the list of **mandatory** immunizations required for public school pupils.

Other measures which will become law if signed by the Governor include ones which relieve physicians of liability in certain review situations, reverse the present law on prescription labeling, provide regulations for ambulances and allow a physician to refuse to perform an abortion if it is against his religious, moral or ethical principles.

A "Good Samaritan" bill, long sought after in Missouri, was not passed due mainly to an internal struggle in the Senate which resulted in the 13 Republican Senators boycotting all actions for a period of about four hours. It was during this time the "Good Samaritan" bill came up for debate and there were too few Senators present to gain the Constitutional majority required to pass the bill.

However, in later action, the House and Senate tacked "Good Samaritan" language onto the ambulance bill which was passed.

Following is a list of actions taken on some of the more important medically-related bills introduced in the 77th General Assembly.

BILLS PASSED

Physician Immunity (SB 62) relieves physicians of liability for actions taken by medical review, hospital review or other review committees of which they are members, if the actions were taken without malice and after efforts to establish the facts.

County Medical Examiner (SB 122) establishes a County Medical Examiner System in Greene and Clay Counties to replace the Coroner System. The Examiner MUST be a physician. Other counties have the option to adopt the Examiner System. Amendments to the bill which would have made a physician **optional** as an Examiner and which would have eliminated the

Please See Next Page

General Assembly passes 14 medically- related bills

Continued from Previous Page

opportunity of other counties adopting the new system were defeated.

Prescription Labeling (SB 42) requires pharmacists or a physician to place exact name and dosage of a prescribed drug on every container label, **unless** otherwise directed by the physician.

Embalmers-Eye Enucleation (SB 34) Permits licensed embalmers, who have completed a certified medical course, to enucleate eyes when they have been donated by the deceased.

Ambulance Regulations (SB 57) provides for licensing and regulation of ambulances, drivers and attendents by the Division of Health. Also sets equipment standards. A "Good Samaritan" amendment added by House Committee was included in this bill.

Smallpox Immunization (HB 342) removes smallpox from the list of **mandatory** immunizations required for public school pupils. This measure has been **signed** into law by Governor Bond.

Emergency Medical Services (HB 437) creates the "Missouri Emergency Medical Services Act" and sets up funding mechanism to receive and dispense federal monies for emergency medical services.

"Good Samaritan" (HB 311) although this bill was not passed, "Good Samaritan" provisions were included in SB 57.

Blue Cross-Blue Shield (SB 3) places the Blues under regulation of the Missouri Division of Insurance. The original bill carried 17 amendments, including one which would have included payment of chiropractic services. Following several days of a Joint Committee Conference debate, the bill was reported out in the waning hours of the Session **without** the chiropractic amendment and promptly passed both Houses.

Abortion Conscience (HB 731-793) provides that no physician, allied personnel or hospital would have to treat or admit any woman for the purpose of abortion if such treatment was against the policy of the hospital or against the religious, moral or ethical principles of the medical personnel. Several bills which would have limited the methods of abortion were defeated.

Home Health Care Services (HB 397) establishes a Bureau of Health Care Services for the Aged and Chronically Ill within the State D sion of Health.

Hearing Aid Regulations (HB 257-396) requi persons fitting hearing aids to be licensed the Department of Public Health and Welfa Those persons 18-years-old or younger m see a physician before fitting. An attempt drop the requirement for youths to see a ph cian was defeated.

Speech Pathology (HB 329) creates a Comr tee of Examiners for Speech Pathology and C ical Pathology under the Board of Healing A

Hospital Aid (HB 605) provides that the st will reimburse a city, county, corporation district one-tenth of the net amount of pul funds spent for the operation of a hospital.

BILLS NOT PASSED

Statute of Limitations (HB 610) would have tended the Statute of Limitations in malpract suits from the present **two** years to fi years from the act complained of.

Delegation Amendment (HB 314) would ha provided that non-licensed technicians could employed by a physician to carry out certa duties under responsible supervision. Bill w actively opposed by optometrists and pharn cists.

Chiropractic-Hand (HB 132-SB 95) would ha eliminated the restriction that chiropract can only adjust or treat the spine "by hand."

Chiropractic-Scope (HB 451) would have tended the scope of practice of chiroprac through language changes in the statutes.

Chiropractic-Education (HB 376) would ha required applicants to chiropractic college have a minimum of 60 semester hours of lege credit leading toward an Arts and Scie degree from an accredited college or universi MSMA did not take position. Chiroprac "straights" and "mixers" could not agree bill.

Radiologists-Licensing (HB 340) extended cr ibility to chiropractors in the area of radiolo technology.

"Sick Doctor" (HB 805) was put in as a "tr balloon" this Session. Bill is designed to p vide an opportunity for an agency to help s doctors before those doctors lose their licen

MSMA Council begins action on House Resolutions

Several items of business referred from the House of Delegates were taken up by the MSMA Council at its June 2-3 meeting in Jefferson City.

The Council carried out House directions by naming two committees and referring several Resolutions to permanent committees and commissions for action.

An Ad Hoc Committee on Midwifery legislation in Missouri. William T. Griffin, M.D., of Columbia, has accepted the appointment as chairm Other committee member's names will be releas on their acceptance.

The Council requested Richard P. Bowl M.D., Chairman of the Public Affairs Comm sion, to re-appoint an MSMA Ad Hoc Commit on Emergency Medical Services to work on E and to provide assistance to other agencies invol with EMS.

Please See Next P

MSMA Council Begins Action on House Resolutions

(Continued from preceding MSMA News Round-Up*)*

The House Resolution calling for health and hospital insurance for the newborn was referred to he Constitution and Bylaws Committee and the Resolution seeking educational funds for MMPAC was referred to the Finance Committee.

In other actions, the Council:

- Voted to continue the project whereby the *AMA Newsletter* is mailed to key personnel on each hospital staff to be posted on the bulletin board.
- Voted to recommend discontinuance for the present of the Mini-Estes Hospital program because of declining attendance.
- Agreed to appoint a MSMA representative to he newly-established Missouri Family Planning Health Council. The new organization has been established in an effort to combine the activities of all family planning clinics in out-state Missouri under one funding agency.
- Received a report on the Hospital Discharge Data program proposed by the Missouri Division of Health.
- Endorsed proposed "Breast Cancer Detection Demonstration Projects" by the Cancer Research Center, Columbia.
- Recommended no change in the format for the House of Delegates at the 1974 Annual Session, April 4-7, in Kansas City. A Bylaws change regarding resolution introduction may have some effect on the House's way of doing business. However, it was felt that the House may propose its own solution if problems do crop up.
- Endorsed AMA Nutrition Seminars to be held at several colleges in Missouri this fall. The MSMA will co-sponsor the Seminars but the AMA will bear all related costs.
- Recommended that the MSMA Membership Committee proceed with implementing projects to educate members and non-members on the advantages of joining or re-joining the MSMA and AMA.
- Voted to request an AMA Survey Team to survey the MSMA as to member services and other related matters. The survey is at no charge to the MSMA.
- Referred correspondence from the AMA concerning "Sick Doctor" legislation to Legal Counsel.
- Voted to set up a "Leadership Crash Course" in cooperation with the AMA. Dates will be announced later.

Additional MSMA Members Named to CHP Council

Four additional MSMA members have been named to the Governor's Advisory Board on Comprehensive Health Planning by Gov. Christopher S. Bond.

Those appointed are Robert W. Kelly, M.D., St. Louis; Robert W. Edmonds, M.D., Sedalia; Charles P. McGinty, M.D., Cape Girardeau; and George Q. Dunmire, M.D., Kennett.

Bond previously named seven MSMA members to the Council as reported in the June issue of Missouri Medicine.

Participants in Annual Session Programs

Dr. Maxwell G. Berry, Kansas City, served as Moderator for the General Session on Saturday. Panelists were Dr. Edward C. Rosenow, Jr., Philadelphia, Pa.; Dr. Robert A. Chase, Stanford, Calif.; and Dr. William B. Hildebrand, Menasha, Wisc.

Dr. W. Mitchell Sams, Jr. of Denver, Colo. and Dr. Norma D. Farmer of Farmington. Dr. Sams, who is Professor and Head of the Division of Dermatology, University of Colorado Medical Center, conducted a scientific session.

Fund Reserve

Balance January 1, 1972		$439,884.12
Cash Additions for the year 1972		
Interest on Loans	$ 5,154.57	
Interest on Bank Deposits	1,753.28	
Contributions (see below)	5,153.24	
Assessment of Members—Active $10.00; Junior $5.00	37,422.50	
Less Expenses	(4,259.13)	
Total for year 1972		$ 45,224.46
Total Reserve		$485,108.58

Contributions

Woman's Auxiliary to Jackson County Medical Society	$ 100.00
Woman's Auxiliary to St. Louis Medical Society	300.00
Woman's Auxiliary to St. Louis County Medical Society	120.00
KMOX Radio (Journalism Award from MSMA)	150.00
Max S. Franklin, M.D., St. Louis, Mo.	100.00
Woman's Auxiliary to Cole County Medical Society	100.00
John F. Bowser, M.D., Kansas City, Mo.	100.00
Woman's Auxiliary to MSMA (Fall Conference)	100.00
Woman's Auxiliary to Clay County Medical Society	717.50
Albert D. Cross, M.D., Trenton, Mo.	100.00
Miller's Medical Arts Pharmacy, Inc., Boonville, Mo.	100.00
Long's Drug Shop, Boonville, Mo.	100.00
Boonville Medical Group, Boonville, Mo.	100.00
Boone County Medical Society—Polio Fund	2,402.74
Sub-total	$4,590.24
Contributions under $100 each	563.00
Total Contributions	$5,153.24

In referring to the financial report, Dr. Stuart pointed out that the MSMF had received $15,000 on Jan. 11, 1973 from the estate of the late Dr. Richard S. Battersby of Boone County. He also expressed appreciation for the generous contributions and support received during the past year from the Woman's Auxiliary to the MSMA.

Mr. Tom Fox, Assistant Secretary, discussed the fact that the MSMF office would move to 113 Madison Street in Jefferson City in May and described office equipment needs. Dr. Kenneth Hollweg moved that necessary office equipment be purchased at the discretion of Mr. Fox. His motion was seconded and approved.

Mr. Fox then pointed out that the MSMF had processed 59 loan applications in 1968 and that number had increased to 119 loan applications in 1972. Since the workload had increased to this extent and is continuing to increase, it was moved to tentatively approve hiring a part-time secretary and bookkeeper if and when her services are needed. The motion was seconded and approved.

Dr. Miles C. Whitener reported that he had been informed that the Woman's Auxiliary to the MSMA will increase its efforts on behalf of the MSMF during the coming year by assigning to one member in each county auxiliary the responsibility of raising funds for the Foundation.

Dr. Stuart called for the next order of business which was election to the Board of Trustees. He asked Dr. David N. Kerr, Chairman, to present the report of the Nominating Committee.

Dr. Kenneth C. Hollweg was reelected by unanimous vote to serve another five-year term on the Board of Trustees.

Dr. E. A. Stricker, incoming MSMA President, was unanimously elected as an Ex Officio Member of the Board to replace Dr. Walter T. Gunn, retiring President.

The President then called for introduction of additional new business. There being none, he announced that a short meeting of the MSMF Board of Trustees would immediately follow the Annual Meeting of the Missouri State Medical Foundation.

The meeting was adjourned.

Minutes of the MSMF Board of Trustees Meeting Chase-Park Plaza Hotel Friday, March 30, 1973

The meeting of the Board of Trustees of the Missouri State Medical Foundation was called to order by Byron M. Stuart, M.D., President, immediately after the adjournment of the Annual Meeting.

There was a discussion of a method for solicitation of contributions from the full membership of the MSMA. It was pointed out that results from letters and other promotional material published in Missouri Medicine again exceeded contributions made in previous years in response to a mailing to the full membership. After discussion, it was decided that solicitation for contributions again be made through Missouri Medicine in 1973-1974.

The next order of business was the election of officers. On behalf of the Nominating Committee, Chairman David N. Kerr, M.D. announced the following nominations: Byron M. Stuart, M.D. of Boonville, President; Max S. Franklin, M.D., St. Louis, Vice-President; and Charles R. Doyle, M.D., St. Louis, Secretary-Treasurer. It was moved, seconded and approved that these officers be reelected by acclamation.

Mr. Thomas P. Fox was reappointed Assistant Secretary and will continue to assist in the administration of the Foundation's program.

There being no further business, the meeting was adjourned.

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113 Madison, Jefferson City, Missouri 65101

The Council Reports

Meeting of April 1, 1973

E. A. Stricker, M.D., St. James, President, called the meeting to order. Those present were Drs. Stricker; Walter T. Gunn, St. Louis; James C. Cope, Columbia; Gerald L. Miller, Kansas City; John I. Matthews, Jefferson City; Donald Judd, St. Louis; Robert A. Slickman, Kansas City; R. Allen Chandler, Kansas City; Max S. Franklin, St. Louis; John N. Martin, St. Joseph; Lysle M. Bach, Hannibal; Louis P. Hetlage, Troy; Robert E. Bregant, Jefferson City; William D. Bradshaw, Clinton; Howard J. McAlhany, Springfield; Claude W. Cooper, Thayer; Eugene T. Hansbrough, Poplar Bluff; William C. Allen, Columbia; Messrs. Lee Mortenson, Chicago, Ill.; John Noble, Kennett; Tom Papreck, Columbia; Allen D. Smith and Roger Weis, Kansas City; Hollister Smith, St. Louis; Ray McIntyre, Royal O. Cooper and C. C. Swarens, Jefferson City, Staff.

Dr. Stricker opened the meeting and introduced the new Councilor from the 5th District, Dr. Robert E. Bregant of Jefferson City.

Dr. Miller thanked the Councilors, Officers and staffs for their cooperation and for the privilege of working with them during his tenure in the various offices.

Dr. R. Allen Chandler was nominated and elected Chairman of the Council by unanimous vote and, thereby, became the presiding officer.

Dr. Max S. Franklin was elected Vice-Chairman of the Council. Dr. Donald Judd was elected Treasurer and Dr. John I. Matthews was elected Secretary.

The next meeting of the Council will be held on June 2-3, 1973, at the Ramada Inn, Jefferson City.

Dr. Chandler then made the following appointments to the Finance and Budget Committee, indicating that this would now be one committee: Drs. Judd, Chairman; Stricker; McAlhany; Cope; and Chandler.

Dr. Hetlage said that he wished to introduce several resolutions at this time. He moved that the following resolution entitled "Increased Socioeconomic Activity by the AMA Officers and Board of Trustees" be adopted. This motion was seconded and carried.

> WHEREAS, The practice of medicine is beset at this point in history by a multitude of socioeconomic problems, and
>
> WHEREAS, The American Medical Association, as the national body of Medicine, properly should represent the profession on a national basis in the resolution of these problems, and
>
> WHEREAS, It is the desire of the members of the Missouri State Medical Association to be so represented, therefore be it
>
> *Resolved*, That the Council of the Missouri State Medical Association calls upon the officers and Board of the American Medical Association to adopt a continuing "hard line" in dealing with those outside influences which are disruptive to the harmony of the profession and which are producing socioeconomic problems

Newly-elected Fifth District Councilor Robert E. Bregant *(third from left)* visits with the five Councilors who were reelected at the April 1 Council meeting. *(From the left)* Drs. Eugene T. Hansbrough, Tenth District; Lysle M. Bach, Second District; Howard J. McAlhany, Eighth District; William D. Bradshaw, Sixth District; and Louis P. Hetlage, Fourth District.

for the individual practitioner, and be it further

Resolved, That this resolution be carried by our AMA Delegation to the June, 1973 session of the American Medical Association House of Delegates for their further implementation.

Dr. Hetlage then introduced a resolution regarding the composition of the Missouri Mental Health Commission. A bill presently in the General Assembly seeks to change the present composition of the Commission. Dr. Hetlage moved that the following resolution be adopted. Motion was seconded and carried.

Whereas, A bill has been introduced to change the composition of the Missouri State Mental Health Commission from four physicians and three laymen to three physicians and six laymen, and

Whereas, The orientations for diagnosis, treatment and comprehension of psychiatric cases and problems should be primarily medical, and

Whereas, Input by laymen is desirable, therefore be it

Resolved, That the Councilors of the MSMA recommend that the composition of the Missouri State Mental Health Commission be preserved as is, and be it further

Resolved, That this resolution be forwarded to the members of the Missouri General Assembly.

Dr. Hetlage indicated that he had a third resolution, but did not have copies of it. He suggested that he would send copies to the Council prior to the next Council meeting and would like for this resolution to be tabled until that time. He stated that this resolution regarded the possible appointment of a special ad hoc committee to study the constitutional structure of MSMA in comparison to those constitutions of other states and to make recommendations to the standing committee on Constitution and Bylaws regarding changes.

Dr. Bradshaw said that he felt that a courtesy resolution should be introduced in future House of Delegates meetings regarding the attendance of whatever AMA representative is present, thanking them for their attendance. It was suggested that Dr. Sammons be sent a letter expressing appreciation of his presence at the 115th Annual Session of MSMA.

COMMITTEE TO STUDY PRIMARY PATIENT CARE

Dr. Bradshaw said that the committee to study the feasibility of additional training of physicians in primary patient care had met, and he submitted a committee report for education only. He stated that they had no recommendations to make at this time. He indicated that he would like to expand the size of the committee and continue to study this problem. He asked each Councilor to submit a name of a physician from his district who might be interested in serving on this committee.

REPORT OF MEMBERSHIP COMMITTEE

Dr. Martin reported on activities of the membership committee and indicated that he would like to keep the same members on this committee and add Dr. Hetlage and Dr. Judd. Dr. Martin presented four resolutions regarding a membership drive and recruitment, which were seconded and passed by the Council. These resolutions are as follows:

FURTHER MEMBERSHIP DRIVE STUDY

Resolved, That the newly appointed membership committee study the costs and specific means of implementing the following membership programs and report back to this Council at its June, 1973 meeting, with recommendations for action on:

1. A slide and script "road show" for use by Councilors at county meetings on the benefits of AMA-MSMA membership.
2. A year-end mailing to nonmembers from members of their specialty society urging their joining.
3. A year-end mailing to nonmembers by members of their hospital staff.
4. A one-day practice management clinic, discussing organized medicine, in cooperation with the appropriate institution and be it

Resolved, That this committee continue its studies on all si areas of membership recruitment and report to this Council on it findings as they progress.

PAC EDUCATIONAL FUNDING AND PAC NEWSLETTER

Whereas, The MSMA House of Delegates recently approve the transfer of MSMA dollars to MMPAC for educational pu poses, and

Whereas, Less than 50% of MSMA members are MMPAC AMPAC members, therefore be it

Resolved, That newly formed Membership Committee, in co operation with the MMPAC Board, study and make specific rec ommendations on the costs and implementation of the followin and report to this Council at the June, 1973 Council meeting:

1. A regular and separate MMPAC newsletter.
2. A separate PAC brochure on PAC benefits and plans fo distribution to nonmembers in conjunction with a separat billing to nonmembers.
3. A PAC workshop this fall on PAC key-man programs an next year's political contests.

INTERN & RESIDENT RECRUITMENT DRIVE

Whereas, Interns and residents are the future of organize medicine and the medical profession, and

Whereas, Many interns and residents do not realize that or ganized medicine is open to them, therefore be it

Resolved, That MSMA, in cooperation with the AMA regiona office, immediately undertake the following actions from the stat office:

1. Send a welcome letter with an invitation to join their loca society and direct responses to the appropriate local so cieties.
2. Work with those component societies in the area of medica schools to undertake a "person-to-person" campaign.

IMMEDIATE MEMBERSHIP DRIVE

Whereas, The number of Missouri members in the AMA ha recently decreased, and

Whereas, The percentage of physicians in Missouri is decreasing and

Whereas, There is an immediate and compelling need fo MSMA to begin a 1973 membership recruitment drive, therefor be it

Resolved, That the staff of MSMA, in cooperation with the AMA Regional Office, immediately undertake the following actions from the state office:

1. Send "thank you" notes to new and renewing members.
2. Send a letter to all physicians who have not renewed AMA or MSMA membership by July 1 of every year, requesting that they reconsider.
3. Undertake a statewide "person-to-person" membership solicitation program, directly to rural counties and in cooperation with large metropolitan counties as suggested in the Membership Committee's report.
4. Develop a basic combination AMA-MSMA benefits brochure for distribution to non-renewing and new nonmembers.

Dr. Bradshaw asked what the position of the Guild presently is, and what will be the activity of the Ad Hoc Committee who worked on this, if any, due to the action of the House of Delegates regarding the Guild. The Chairman asked Legal Counsel to present the Council with a status report at the next meeting.

Mr. McIntyre indicated that previously, resolutions had been passed authorizing three individuals to sign checks from both main bank accounts at Mercantile Trust Company—our regular checking account and the new building fund. He proposed that the resolutions which had been passed be passed again with three names authorized to sign checks on the two different accounts. Motion was made, seconded and passed that Dr. Stricker, Dr. Judd and Mr. McIntyre be so authorized. Mr. McIntyre said that all three are bonded.

Dr. Hetlage brought up the matter of the insurance that the Association carries on the Council, Officers, Commission and Committee members when on official business. He asked whether or not this insurance is in force if he, as a Councilor, attends a meeting in Jefferson County. It was stated that, possibly, this should be clarified. The Chairman asked the Executive Secretary to include this in his report at the next Council meeting.

The meeting was adjourned.

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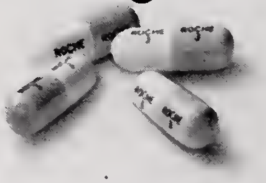

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116th MSMA Annual Session
April 4-7, 1974 Kansas City

Missouri Medicine

THE JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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113 Madison St., P. O. Box 1028, Jefferson City, Mo. 65101
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Purposes of Association

THE PURPOSES of the Missouri State Medical Association are to bring into compact organization the entire medical profession of the State of Missouri with the view of the extension of medical knowledge and the advancement of medical science, to promote and elevate the standards of medical education and the enactment and enforcement of just medical and public health laws, to encourage friendly intercourse among physicians, to guard and sustain measures of interest and advantage to the public and the medical profession and to promote science, knowledge and skill among the medical profession.

1950 MSMA Handbook
Centennial Issue

How to Use This Directory

This Directory includes two rosters of physicians who are members of the Missouri State Medical Association.

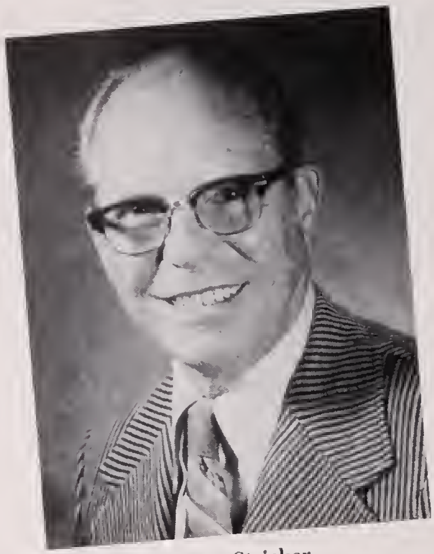
The **Roster of Members by County Societies** on page 539 lists each county medical society in alphabetical order, the members of each county medical society and their **street addresses.**

If you are seeking a street address and do not know to which county medical society a member belongs, turn to the **Alphabetical Roster of Members** on page 523 which lists that member's name and the community in which he lives.

Locate the name of that community in the **Guide to County Medical Societies** on page 521 which tells you the county in which that community is located and the county medical society to which that member normally would belong.

The **Roster for the Woman's Auxiliary to the MSMA,** beginning on page 561, lists the officers, directors, committee chairmen, MSMA Advisory Council, presidents of county auxiliaries, districts, state past-presidents and members of each county auxiliary.

For other departments, please refer to the table of contents on the cover page.



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Stanley S. Peterson
(1973-1974)

J. Loren Washburn
(1973-1974)

Hector W. Benoit, Jr.
(1972-1973, 1974-1975)

Arthur W. Neilson
(1972-1973)
(Deceased)

Hubert A. Ritter
(1974-1975)

Alternate Delegates

James C. Sisk
(1973-1974)

Rae W. Froelich
(1973-1974)

Hugh E. Stephenson, Jr.
(1972-1973, 1974-1975)

Robert W. Kelley
(1972-1973)

Lawrence W. O'Neal
(1974-1975)

The Council

John N. Martin
1st District

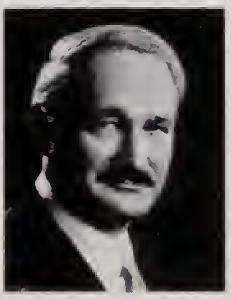
Lysle M. Bach
2nd District

Max S. Franklin
3rd District
Vice-Chairman

Louis P. Hetlage
4th District

Robert E. Bregant
5th District

William D. Bradshaw
6th District


R. Allen Chandler
7th District
Chairman

Howard J. McAlhany
8th District

Claude W. Cooper
9th District

Eugene T. Hansbrough
10th District

MSMA Committees and Commissions 1973-1974

STANDING COMMITTEES

Executive Committee—E. A. Stricker, St. James, Chairman; James C. Cope, Columbia; John I. Matthews, Jefferson City; Donald Judd, St. Louis; R. Allen Chandler, Kansas City; Max S. Franklin, St. Louis (1974).

Constitution and Bylaws—Miles C. Whitener, St. Louis, Chairman (1974); Edwin M. Powell, Springfield (1975); Joseph Conrad, Chillicothe (1975); Donald Judd, St. Louis (1976); R. Stacy Long, Kansas City (1976).

Publication—Joseph V. Finnegan, St. Louis, Chairman; William C. Mixson, Kansas City; Charles S. Sherwin, St. Louis; Byron M. Stuart, Boonville; Wilfred Wooldridge, Springfield (1974).

Legislative Affairs—John I. Matthews, Jefferson City, Chairman; R. Allen Chandler, Kansas City; James C. Cope, Columbia Robert E. Bregant, Jefferson City; Lawrence W. O'Neal, St. Loui (1974).

Planning—David N. Kerr, St. Louis, Chairman (1975); Charle P. McGinty, Cape Girardeau (1974); James C. Cope, Columbi (1974); Hector W. Benoit, Jr., Kansas City (1975); Oral B Crawford, Springfield (1976); James A. Hasek, Mountain Grov (1976); William D. Bradshaw, Clinton (1977); J. Will Fleming Moberly (1977); T. N. Cofer, Chillicothe (1978); Paul H. Rother, St. Charles (1978).

Voluntary Health Agencies—William C. Allen, Columbia Chairman (1974); Carl Siegel, Kansas City (1975); Melvin A Cassel, St. Louis (1975); Joseph L. Fisher, St. Joseph (1976) Paul S. Quinn, Springfield (1976).

STANDING COMMISSIONS

Public Affairs—Richard P. Bowles, Liberty, Chairman (1976); Joseph Kendis, St. Louis (1974); W. W. Tillman, Jr., Springfield (1974); John L. Barnard, Jr., Kansas City (1974); Allen Klippel, St. Louis (1974); Joseph Zimmerman, Kennett (1974); Troy Morgan, Albany (1975); R. A. Ritter, Jr., Cape Girardeau (1975); C. Keith Whittaker, Kansas City (1975); Stanley G. Hall, Hannibal (1975); J. E. Block, Sedalia (1975); Byron E. Watts, Jefferson City (1976); Hubert A. Ritter, St. Louis (1976); Richard A. Sutter, St. Louis (1976).

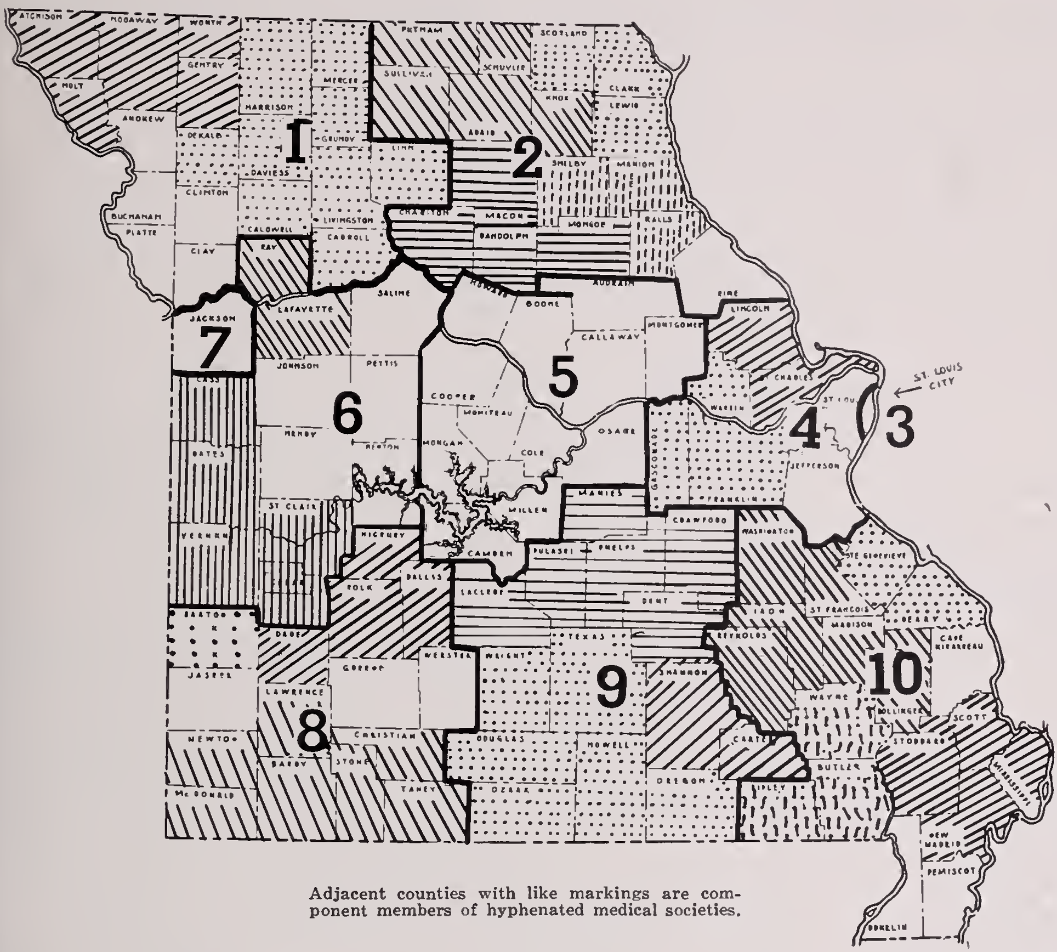
Medical Economics, Third Party Medicine and Governmental Relations—Stanley S. Peterson, Springfield, Chairman (1975); Rolla B. Wray, Nevada (1974); Charles W. Chastain, Farmington (1974); Blaine Z. Hibbard, Kansas City (1974); E. Warren Allen, Carrollton (1974); Robert H. Lund, St. Louis (1974); Francis M. Maple, Springfield (1975); Victor B. Buhler, Kansas City (1975); Mark D. Eagleton, St. Louis (1975); E. E. Wadlow, St. Joseph (1975); Herbert C. Wiegand, St. Louis (1976); Max A. Heeb, Sikeston (1976); Kenneth K. Keown, Columbia (1976); Rae W. Froelich, Lebanon (1976); E. J. Cunningham, Jr., St. Louis (1976).

Continuing Education and Health Manpower—George H. Ladyman, Poplar Bluff, Chairman (1975); Richard A. Fraser, Poplar Bluff (1974); R. E. Catanzaro, St. Louis (1974); W. Thomas Morgan, Jr., West Plains (1974); Charles Spears, Branson (1974); W. Wayne Boydston, Odessa (1974); H. Peter Ekern, Mexico (1975); B. J. Bass, Salem (1975); Paul R. Young, Columbia (1975); Lucien W. Ide, St. Joseph (1975); Andrew McCanse, Kansas City (1976); A. Sherwood Baker, Columbia (1976); Richard J. Dames, St. Louis (1976); John C. Soucy, St. Charles (1976); Charles A. Worley, Sweet Springs (1976).

Medical-Legal Affairs—Frederick J. McCoy, Kansas City Chairman (1976); Joseph S. Cope, Lexington (1974); Jerome I Simon, Clayton (1974); Irving H. Clark, Kansas City (1974) Jack R. Eidelman, St. Louis (1974); George P. Wilson, Columbia (1974); Lee T. Ford, Jr., St. Louis (1975); Robert V. Tompson, Moberly (1975); Wilbur P. McDonald, St. Joseph (1975) Harold B. Rapp, Cape Girardeau (1975); William R. McPhee Kansas City (1975); David W. Brown, Springfield (1976) Francis X. Paletta, St. Louis (1976); Bernard Draper, Roll (1976); Robert L. Wilcoxon, Joplin (1976).

Commission on Interspecialty Medicine—*Missouri State Surgical Society*, Cyril Costello, St. Louis, Chairman; *St. Louis Society of Neurological Sciences*, Herbert E. Rosenbaum, St. Louis. *Missouri Ophthalmological Society, Inc.*, Truman Schertz, North Kansas City; *Missouri Society of Internal Medicine*, Hugh R. Waters, St. Louis; *Missouri Psychiatric Association*, George J. Lytton. Kansas City; *Missouri Chapter, American Academy of Pediatrics*. Francis X. Lieb, St. Louis; *Missouri State Society of Neurological Surgeons*, William S. Coxe, St. Louis; *Missouri State Allergy Association*, James W. Willoughby, Kansas City; *Missouri Dermatological Society, Inc.*, Norman Asel, Columbia; *Physical Medicine and Rehabilitation*, Robert W. Allen, Columbia; *Missouri OB-GYN Society*, William Walker, Springfield; *Missouri Chapter. American College of Surgeons*, G. Lynn Krause, St. Louis; *Missouri Ear, Nose and Throat Association, Inc.*, Robert M. Hazen. Kansas City; *Missouri Pathology Society*, Henry C. Allen, St Louis; *Missouri Radiological Society*, George P. Wilson, Columbia; *Federation of Missouri Urologists*, Larry G. Markel, Kansas City; *Missouri Society of Anesthesiologists*, Edwin Bowe, Jefferson City; *Society of Thoracic and Cardiovascular Surgeons*, Charles Roper, St. Louis.

Councilor Districts and Counties in Each District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10
ST. LOUIS CITY
ATCHISON
NODAWAY
WORTH
HOLT
GENTRY
ANDREW
HARRISON
MERCER
PUTNAM
SCOTLAND
CLARK
SULLIVAN
SCHUYLER
KNOX
LEWIS
DEKALB
GRUNDY
DAVIESS
LINN
ADAIR
SHELBY
MARION
CLINTON
BUCHANAN
PLATTE
CALDWELL
LIVINGSTON
CARROLL
CHARITON
MACON
RANDOLPH
MONROE
RALLS
CLAY
RAY
JACKSON
LAFAYETTE
SALINE
HOWARD
BOONE
AUDRAIN
PIKE
LINCOLN
CALLAWAY
MONTGOMERY
CASS
JOHNSON
PETTIS
COOPER
MONITEAU
ST. CHARLES
WARREN
ST. LOUIS
BATES
HENRY
BENTON
MORGAN
COLE
OSAGE
GASCONADE
FRANKLIN
JEFFERSON
ST. CLAIR
MILLER
MARIES
VERNON
HICKORY
CAMDEN
PULASKI
PHELPS
CRAWFORD
WASHINGTON
STE. GENEVIEVE
POLK
DALLAS
LACLEDE
DENT
IRON
ST. FRANCOIS
MADISON
PERRY
BARTON
DADE
WEBSTER
WRIGHT
TEXAS
REYNOLDS
CAPE GIRARDEAU
JASPER
GREENE
SHANNON
LAWRENCE
WAYNE
BOLLINGER
SCOTT
NEWTON
CHRISTIAN
DOUGLAS
HOWELL
CARTER
STODDARD
BARRY
STONE
BUTLER
MISSISSIPPI
McDONALD
TANEY
OZARK
OREGON
RIPLEY
NEW MADRID
PEMISCOT
DUNKLIN

Adjacent counties with like markings are component members of hyphenated medical societies.

DISTRICT	COUNCILOR	COUNTIES
First	**John N. Martin, M.D.** St. Joseph	Andrew, Atchison, Buchanan, Caldwell, Carroll, Clay, Clinton, Daviess, De Kalb, Gentry, Grundy, Harrison, Holt, Linn, Livingston, Mercer, Nodaway, Platte and Worth
Second	**Lysle M. Bach, M.D.** Hannibal	Adair, Chariton, Clark, Knox, Lewis, Macon, Marion, Monroe, Pike, Putnam, Ralls, Randolph, Schuyler, Scotland, Shelby and Sullivan
Third	**Max S. Franklin, M.D.** (Vice-Chairman) St. Louis	St. Louis (City)
Fourth	**Louis P. Hetlage, M.D.** Troy	Franklin, Gasconade, Jefferson, Lincoln, St. Charles, St. Louis (County) and Warren.
Fifth	**Robert E. Bregant, M.D.** Jefferson City	Audrain, Boone, Callaway, Camden,* Cole, Cooper, Howard, Miller, Moniteau, Montgomery, Morgan and Osage*
Sixth	**William D. Bradshaw, M.D.** Clinton	Bates, Benton, Cass, Cedar, Henry, Johnson, Lafayette, Pettis, Ray, St. Clair, Saline and Vernon
Seventh	**R. Allen Chandler, M.D.** (Chairman) Kansas City	Jackson
Eighth	**Howard J. McAlhany, M.D.** Springfield	Barry, Barton, Christian, Dade, Dallas, Greene, Hickory, Jasper, Lawrence, McDonald, Newton, Polk, Stone, Taney and Webster
Ninth	**Claude W. Cooper, M.D.** Thayer	Carter, Crawford, Dent, Douglas, Howell, Laclede, Maries, Oregon, Ozark, Phelps, Pulaski, Shannon, Texas and Wright
Tenth	**Eugene T. Hansbrough, M.D.** Poplar Bluff	Bollinger, Butler, Cape Girardeau, Dunklin, Iron, Madison, Mississippi, New Madrid, Pemiscot, Perry, Reynolds, Ripley, St. Francois, Ste. Genevieve, Scott, Stoddard, Washington and Wayne

---

* Counties with no medical organization.

Component Societies in Affiliation With the Missouri State Medical Association

County	District	President	Address	Secretary	Address
Andrew	1	Gilbert B. Kelley	Savannah	Warren C. Baker	Savannah
Audrain	5	Edgar S. Wallace	Mexico	Thomas L. Dwyer	Mexico
Barton	8	Alvin R. Cain	Lamar	Thomas W. Carroll	Lamar
Boone	5	William R. Bynum	Columbia	George P. Wilson	Columbia
Buchanan	1	Elza F. Butler	St. Joseph	G. Tyson Carpenter	St. Joseph
Butler-Wayne-Ripley	10	E. C. Carlson	Poplar Bluff	Tom Wood	Poplar Bluff
Callaway	5	Vernon B. Jackson	Fulton	George Groce	Fulton
Cape Girardeau	10	Dale M. Blankenship	Cape Girardeau	Robert S. Hunt	Cape Girardeau
Chariton-Macon-Monroe-Randolph	2	Robert H. Young	Moberly	Robert V. Tompson	Moberly
Clay	1	Daniel C. Boone	Kansas City	E. K. Burke	Kansas City
Clinton	1	Wilber B. Spalding	Plattsburg	James H. Sweiger	Plattsburg
Cole	5	Jack S. Sanders	Jefferson City	Larry P. Courter	Jefferson City
Cooper	5	Byron M. Stuart	Boonville	E. T. Humphreys	Boonville
Dallas-Hickory-Polk-Dade	8	O. A. Griffin	Buffalo	Evelyn Griffin	Bolivar
Dunklin	10	Wallace D. English	Cardwell	Quinton Tarver	Kennett
Franklin-Gasconade-Warren	4	Donald L. Baker	Union	Thomas J. Mitchell	St. Clair
Grand River Medical Society (Caldwell-Carroll-Livingston-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb)	1	Erroll W. Allen	Carrollton	Thomas N. Cofer	Chillicothe
Greene	8	M. D. Bonebrake	Springfield	Paul S. Quinn	Springfield
Henry	6	Richard H. King	Clinton	R. S. Hollingsworth	Clinton
Howard	5	Wm. G. Marshall	Glasgow	M. P. Leech	Fayette
Jackson	7	C. Y. Thomas, Jr.	Kansas City	T. J. Bryant	Kansas City
Jasper	8	F. Wendell Pence	Carthage	Howard H. Roberts	Joplin
Jefferson	4	Roger Allhee	Crystal City	Vicente D. Deles	Crystal City
Johnson	6			Robert L. Cooper, II	Warrensburg
Lafayette-Ray	6	Wayne Boydston	Odessa	K. E. Koppenbrink	Higginsville
Lewis-Clark-Scotland	2				
Marion-Ralls-Shelby	2	James K. Mann	Hannibal	Dale F. Burton	Hannibal
Mid-Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)	9	Barbara Russell	Rolla	Bernard Draper	Rolla
Miller	5	Edward O. Shelton	Eldon	Carl T. Buehler, Jr.	Eldon
Mineral Area Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Bollinger)	10	Robert Dettmer	Ironton	Kirby Turner	Potosi
Moniteau	5	K. S. Latham	California	L. M. Gallagher	California
Montgomery	5			S. J. Byland	Wellsville
Morgan	5	Jack Gunn	Versailles	C. Robert Hall	Versailles
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)	2	Francis Tarvydas	Edina	Milton T. English	Kirksville
Northwest Missouri Medical Society (Nodaway-Holt-Atchison-Gentry-Worth)	1	B. F. Byland	Maryville	Frank Matteson	Grant City
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald)	8	Arthur J. Graves	Mount Vernon	W. H. Hamilton	Aurora
Pemiscot	10	L. B. Painter, Jr.	Portageville	C. W. McKaskle	Caruthersville
Perry-Ste. Genevieve	10	Ronald D. Craig	Perryville	J. F. Lutkewitte	Ste. Genevieve
Pettis	6	Jerome E. Block	Sedalia	H. J. Erickson	Sedalia
Pike	2	Glenn E. Miles	Louisiana	Mathew L. Nickels	Louisiana
Platte	1	Paul C. Vescovo	Kansas City		
St. Charles-Lincoln	4	Jack Soucy	St. Charles	Wm. H. Poggemeier, Jr.	St. Charles
St. Louis Medical Society	3	Donald R. Judd	St. Louis	Carol F. Williams	St. Louis
St. Louis County Medical Society	4	Allen P. Klippel	St. Louis	Vernon H. Balster	St. Louis
Saline	6	R. W. Blalock	Marshall	Marvin E. Roehrs	Marshall
SEMO County Medical Society (Stoddard-New Madrid-Mississippi-Scott)	10	Robert S. Colbert	Sikeston	Thelma C. Buckthorpe	Sikeston
South Central (Howell-Oregon-Texas-Wright-Douglas-Ozark)	9	Marvin L. Fowler	West Plains	W. T. Morgan, Jr.	West Plains
Webster	8	T. M. Macdonnell	Marshfield	Robert J. Bareis	Marshfield
West Central Missouri Medical Society (Bates-Cass-Cedar-St. Clair-Vernon)	6	Curtis Long	Butler	John Torontow	Nevada

Guide to County Medical Societies

Following is a list of Missouri communities in which MSMA member-physicians are in active practice or reside. Name of the community is followed by the county in which it it is located and the medical society to which physicians of that community normally would belong.

Town	*County*	*Medical Society*
	A	
Affton	St. Louis*	
Albany	Gentry	Northwest Missouri
Altenburg	Perry	Perry-Ste. Genevieve
Appleton City	St. Clair	West Central
Arnold	Jefferson	Jefferson
Aurora	Lawrence	Ozarks
Ava	Douglas	South Central
	B	
Ballwin	St. Louis*	
Belton	Cass	West Central
Berkeley	St. Louis*	
Bethany	Harrison	Grand River
Bloomfield	Stoddard	SEMO
Blue Springs	Jackson	Jackson
Bolivar	Polk	Dallas-Hickory-Polk-Dade
Bonne Terre	St. Francois	Mineral Area
Boonville	Cooper	Cooper
Bourbon	Crawford	Mid-Missouri
Bowling Green	Pike	Pike
Branson	Taney	Ozarks
Braymer	Caldwell	Grand River
Brentwood	St. Louis*	
Bridgeton	St. Louis*	
Brookfield	Linn	Grand River
Browning	Linn	Grand River
Brunswick	Chariton	Chariton-Macon-Monroe-Randolph
Buckner	Jackson	Jackson
Buffalo	Dallas	Dallas-Hickory-Polk-Dade
Butler	Bates	West Central
	C	
Cabool	Texas	South Central
Cainesville	Harrison	Grand River
California	Moniteau	Moniteau
Camdenton	Camden	Camden
Cameron	Clinton	Clinton
Cape Girardeau	Cape Girardeau	Cape Girardeau
Cardwell	Dunklin	Dunklin
Carrollton	Carroll	Grand River
Carthage	Jasper	Jasper
Caruthersville	Pemiscot	Pemiscot
Cassville	Barry	Ozarks
Centralia	Boone	Boone
Charleston	Mississippi	SEMO
Chesterfield	St. Louis*	
Chillicothe	Livingston	Grand River
Clarksville	Pike	Pike
Clayton	St. Louis*	
Clinton	Henry	Henry
Columbia	Boone	Boone
Concordia	Lafayette	Lafayette-Ray
Crane	Stone	Ozarks
Creve Coeur	St. Louis*	
Crystal City	Jefferson	Jefferson
Cuba	Crawford	Mid-Missouri
	D	
Desloge	St. Francois	Mineral Area
DeSoto	Jefferson	Jefferson
Dexter	Stoddard	SEMO
Doniphan	Ripley	Butler-Wayne-Ripley
	E	
East Prairie	Mississippi	SEMO
Edina	Knox	North Central
Eldon	Miller	Miller
El Dorado Springs	Cedar	West Central
Elsberry	Lincoln	St. Charles-Lincoln
Everton	Jackson	Jackson
Excelsior Springs	Clay	Clay
	F	
Farmington	St. Francois	Mineral Area
Fayette	Howard	Howard
Fenton	St. Louis*	
Ferguson	St. Louis*	
Festus	Jefferson	Jefferson
Flat River	St. Francois	Mineral Area
Florissant	St. Louis*	
Forsyth	Taney	Ozarks
Fort Leonard Wood	Pulaski	Mid-Missouri
Fredericktown	Madison	Mineral Area
Frontenac	St. Louis*	
Fulton	Callaway	Callaway
	G	
Gallatin	Daviess	Grand River
Gashland	Clay	Clay
Gerald	Franklin	Franklin-Gasconade-Warren
Gideon	New Madrid	SEMO
Gladden	St. Louis*	
Glasgow	Howard	Howard
Glendale	St. Louis*	
Grandview	Jackson	Jackson
Grant City	Worth	Northwest Missouri
Gravois Mills	Morgan	Morgan
Greenfield	Dade	Barton-Dade
	H	
Hamilton	Caldwell	Grand River
Hannibal	Marion	Marion-Ralls-Shelby
Harrisonville	Cass	West Central
Hayti	Pemiscot	Pemiscot
Herculaneum	Jefferson	Jefferson
Hermann	Gasconade	Franklin-Gasconade-Warren
Hickman Mills	Jackson	Jackson
Higginsville	Lafayette	Lafayette-Ray
Hillsboro	Jefferson	Jefferson
Hornersville	Dunklin	Dunklin
Houston	Texas	South Central
Humansville	Polk	Dallas-Hickory-Polk-Dade
Huntsville	Randolph	Chariton-Macon-Monroe-Randolph
	I	
Illmo	Cape Girardeau	Cape Girardeau
Independence	Jackson	Jackson
Ironton	Iron	Mineral Area
	J	
Jackson	Cape Girardeau	Cape Girardeau
Jefferson Barracks	St. Louis*	
Jefferson City	Cole	Cole
Jennings	St. Louis*	
Joplin	Jasper	Jasper
	K	
Kansas City	Jackson	Jackson
Kennett	Dunklin	Dunklin
King City	Gentry	Northwest Missouri
Kirksville	Adair	North Central
Kirkwood	St. Louis*	
Knobnoster	Johnson	Johnson
Knox City	Knox	North Central
Koch	St. Louis*	
	L	
Ladue	St. Louis*	
Lamar	Barton	Barton
Lawson	Ray	Lafayette-Ray
Leawood (Kan.)		Jackson
Leadwood	St. Francois	Mineral Area

*** Member may belong to St. Louis County Medical Society or St. Louis Medical Society.**

Town	*County*	*Medical Society*
Lebanon	Laclede	Mid-Missouri
Lee's Summit	Jackson	Jackson
Lemay	St. Louis*	
Lexington	Lafayette	Lafayette-Ray
Liberty	Clay	Clay
Lockwood	Dade	Dallas-Hickory-Polk-Dade
Louisiana	Pike	Pike
	M	
Macon	Macon	Chariton-Macon-Monroe-Randolph
Malden	Dunklin	Dunklin
Maplewood	St. Louis*	
Marceline	Linn	Grand River
Marshall	Saline	Saline
Marshfield	Webster	Webster
Martin City	Jackson	Jackson
Maryville	Nodaway	Northwest Missouri
Memphis	Scotland	Lewis-Clark-Scotland
Mexico	Audrain	Audrain
Milan	Sullivan	North Central
Moberly	Randolph	Chariton-Macon-Monroe-Randolph
Monett	Barry	Ozarks
Montgomery City	Montgomery	Montgomery
Morehouse	New Madrid	SEMO
Mound City	Holt	Northwest Missouri
Mountain Grove	Wright	South Central
Mountain View	Howell	South Central
Mount Vernon	Lawrence	Ozarks
	N	
Neosho	Newton	Ozarks
Nevada	Vernon	West Central
New Florence	Montgomery	Montgomery
New Haven	Franklin	Franklin-Gasconade-Warren
New Madrid	New Madrid	SEMO
Normandy	St. Louis*	
North Kansas City	Clay	Clay
	O	
Oak Grove	Jackson	Jackson
Odessa	Lafayette	Lafayette-Ray
O'Fallon	St. Charles	St. Charles-Lincoln
Olivette	St. Louis*	
Osceola	St. Clair	West Central
Overland	St. Louis*	
Owensville	Gasconade	Franklin-Gasconade-Warren
Ozark	Christian	Ozarks
	P	
Pacific	Franklin	Franklin-Gasconade-Warren
Palmyra	Marion	Marion-Ralls-Shelby
Paris	Monroe	Chariton-Macon-Monroe-Randolph
Parkville	Platte	Platte
Parma	New Madrid	SEMO
Pattonsburg	Daviess	Grand River
Pattonville	St. Louis*	
Perryville	Perry	Perry-Ste. Genevieve
Piedmont	Wayne	Butler-Wayne-Ripley
Pine Lawn	St. Louis*	
Platte City	Platte	Platte
Plattsburg	Clinton	Clinton
Pleasant Hill	Cass	West Central
Poplar Bluff	Butler	Butler-Wayne-Ripley
Portageville	New Madrid	SEMO
Potosi	Washington	Mineral Area
Prairie Village (Kan.)		Jackson
Princeton	Mercer	Grand River
	R	
Raytown	Jackson	Jackson
Reeds Spring	Stone	Ozarks

Town	*County*	*Medical Society*
Republic	Greene	Greene
Rich Hill	Bates	West Central
Richmond	Ray	Lafayette-Ray
Richmond Heights	St. Louis*	
Robertson	St. Louis*	
Rock Hill	St. Louis*	
Rockport	Atchison	Northwest Missouri
Rolla	Phelps	Mid-Missouri
	S	
St. Ann	St. Louis*	
St. Charles	St. Charles	St. Charles-Lincoln
St. Clair	Franklin	Franklin-Gasconade-Warren
Ste. Genevieve	Ste. Genevieve	Perry-Ste. Genevieve
St. James	Phelps	Mid-Missouri
St. Joseph	Buchanan	Buchanan
St. Louis City *		
Salem	Dent	Mid-Missouri
Salisbury	Chariton	Chariton-Marion-Monroe-Randolph
Sappington	St. Louis*	
Sarcoxie	Jasper	Jasper
Savannah	Andrew	Andrew
Sedalia	Pettis	Pettis
Shawnee Mission (Kan.)		Jackson
Shelbina	Shelby	Marion-Ralls-Shelby
Shelbyville	Shelby	Marion-Ralls-Shelby
Shrewbury	St. Louis*	
Sikeston	Scott	SEMO
Slater	Saline	Saline
Smithton	Pettis	Pettis
Smithville	Clay	Clay
Springfield	Greene	Greene
Stanberry	Gentry	Northwest Missouri
Steele	Pemiscot	Pemiscot
Steelville	Crawford	Mid-Missouri
Stockton	Cedar	West Central
Strafford	Greene	Greene
Sullivan	Franklin	Franklin-Gasconade-Warren
Sweet Springs	Saline	Saline
	T	
Tarkio	Atchison	Northwest Missouri
Thayer	Oregon	South Central
Trenton	Grundy	Grand River
Troy	Lincoln	St. Charles-Lincoln
	U	
Union	Franklin	Franklin-Gasconade-Warren
University City	St. Louis*	
	V	
Valley Park	St. Louis*	
Vandalia	Audrain	Audrain
Versailles	Morgan	Morgan
	W	
Warrensburg	Johnson	Johnson
Warrenton	Warren	Franklin-Gasconade-Warren
Warsaw	Benton	Benton
Washington	Franklin	Franklin-Gasconade-Warren
Waverly	Lafayette	Lafayette-Ray
Waynesville	Pulaski	Mid-Missouri
Webb City	Jasper	Jasper
Webster Groves	St. Louis*	
Wellsville	Montgomery	Montgomery
Wentzville	St. Charles	St. Charles-Lincoln
West Plains	Howell	South Central
Willard	Greene	Greene
Willow Springs	Howell	South Central
Windsor	Henry	Henry
Winona	Shannon	Carter-Shannon
Winston	Daviess	Grand River

*** Member may belong to St. Louis County Medical Society or St. Louis Medical Society.**

Alphabetical Roster of Members

(See Instructions on Page 515)

A

Aaron, George A., Independence
Abaqueta, Gamaliel P., Kansas City
Abel, Charles C., St. Louis
Abel, Oliver, III, St. Louis
Abele, Wm. A., Boonville
Abelardo, Miguel L., St. Louis
Abell, Walter E., St. Louis
Abella, Bienvenido Z., Kansas City
Abercrombie, Keith J., Kansas City
Abinoja, Conrado B., St. Louis
Abrams, Bernard M., Kansas City
Abrams, Morris, St. Louis
Abramson, Charles L., St. Louis
Acker, Harry L., St. Louis
Ackerman, Lauren V., St. Louis
Ackerman, Norman B., Kansas City
°Ackley, Edward J., Kansas City
Acuff, R. Phillip, St. Joseph
Adams, Harold D., Columbia
Adams, Howard D., Liberty
Adams, Robert B., Jr., Joplin
Adelman, Arthur, Kansas City
Adler, Benard C., St. Louis
Adler, Federico, Kansas City
Agasino, Armela R., St. Louis
Agasino, Gaudencio, Arnold
Agee, Loren G., Kansas City
Agress, Harry, St. Louis
Aguinaldo, Jaime A., St. Louis
Ahad, Abdul, St. Joseph
Ahadi, Abd Ul Ahad, St. Louis
Ahern, Archibald M., St. Louis
Ahlering, George H., Clayton
Ahlvin, Robert C., Sikeston
Ahmad, Bashir, St. Louis
Aitken, Louis F., St. Louis
Aker, Umit, St. Louis
Aks, Daniel, Kansas City
Akvol, Salim, St. Louis
Albano, Benjamin I., Crystal City
Albera, Victor H., St. Louis
Alberg, Marvin R., Kansas City
Alderman, Thomas F., Kansas City
Alegre, Jorge M., St. Louis
Aleksander, Bernardo, St. Louis
Alex, Morris, St. Louis
Alexander, France, St. Louis
Alexander, Frazier D., St. Louis
Alexander, George K., Ballwin
Allain, James J., North Kansas City
Allan, James E., Jefferson City
Allan, James R., Liberty
Allbee, Roger H., Crystal City
Allebach, Hobart K., Kansas City
Allen, Claude J., Rich Hill
Allen, David O., Joplin
Allen, E. Warren, Carrollton
Allen, Henry C., Clayton
Allen, Hollis N., St. Louis
Allen, James H., St. Louis
Allen, Jerry H., Springfield
Allen, Joseph E., Columbia
Allen, Louis A., N. Kansas City
Allen, Melvin A., St. Louis
Allen, Robert E., Kansas City
Allen, Robert W., Columbia
Allen, S. Lloyd, Kansas City
Allen, Willard M., Baltimore, Md. (Member St. Louis Medical Society)
Allen, William C., Columbia
Allen, William E., Jr., St. Louis
Allen, William H., Nevada
Allison, James B., Springfield
Almiron, Osias A., St. Louis
Almond, Carl H., Columbia
Alonso, Jose Mario V., Jr., St. Louis
Alonso, William A., St. Louis
Alonso-Yague, P., St. Louis
Alsop, Webb S., Jr., Kansas City, Kan.
Althaus, Carl Jacob, Ballwin
Altheide, Harvey E., Ladue
Altheide, J. Paul, St. Louis
Altomare, Edward P., Kansas City
Altringer, Arthur N., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Alvarez, Luis L., St. Louis
Alvarez, Ulises C., St. Louis
Alvis, Bennett Y., St. Louis
Alvis, Edmund B., St. Louis
Alyea, J. O., Cape Girardeau
Amado-Ledo, David E., St. Louis
Amjad, Mohammad T., Ballwin
Ames, Mary B., St. Joseph
Ames, William H., St. Joseph
Amin, Navinkumar J., St. Louis
Amlinger, Philipp R., Columbia
Ammatelli, Francis J., Kansas City
Amoury, Raymond A., Kansas City
Ancheta, Apolinario A., Springfield
Andersen, Elmer J. T., Montgomery City
Anderson, Charles B., St. Louis
Anderson, Ivan A., Columbia
Anderson, John M., St. Louis
Anderson, Paul B., Neosho
Anderson, Philip C., Columbia
Anderson, Raymond B., Kansas City
Anderson, Richard W., Kansas City
Anderson, Thomas R., Columbia
Andreassen, Dimil F., Rolla
Andres, Edward H., St. Joseph
Andrews, Berneil W., N. Kansas City (Member Clay County Medical Society)
Andrus, Bailey C., Kansas City
Angelillo, John C., Florissant
Anglo, Luis B., St. Louis
Ansari, Ansar H., St. Louis
Anslinger, David I., St. Louis
Anstey, George, St. Ann
Anthony, Dallas, Springfield
Anthony, Elwyn J., St. Louis
Apostol, Andres G., Monett
Appleberry, Charles H., Rivermines
Aquino, Philip J., Caruthersville
Arat, Metin, Farmington
Arbab, Ali A., Kansas City
Arenberg, Irving K., St. Louis
Arms, Arnold V., Kansas City
Armstrong, Jay H., Shawnee Mission, Kan. (Member Clay County Medical Society)
Arneson, Axel N., St. Louis
Arney, William G., St. Louis
Arnold, Eugene L., St. Louis
Arnold, Herbert M., Lamar
Arnold, John D., Kansas City
Arnold, Kenneth J., St. Louis
Arnold, Richard C., Columbia
Aronoff, Michael E., Olathe, Kan. (Member Jackson County Medical Society)
Aronson, Abraham, St. Louis
Arnot, John P., St. Louis
Arst, Herbert E., Kansas City (Member Clay County Medical Society)
Aschman, Theodore H., Kansas City
Asel, Norman D., Columbia
Ash, Charles J., Springfield
Ashby, Jennifer D., Kansas City
Asher, A. Graham, Kansas City
Ashley, Hugh V., Cape Girardeau
Ashley, Hugh, Jr., Cape Girardeau
Ashley, Thomas F., Springfield
Asnani, Mithlesh G., Kansas City
Atcheson, Windsor B., Trenton
Atkinson, Thomas E., Jr., Springfield
Atwell, Floyd C., Kansas City
Auer, Arthur I., St. Louis
Auer, Edward T., St. Louis
Aufderheide, G. Russell, St. Louis
Auguste, Jean Meledain, St. Louis
Augustin, Cesar, St. Louis
Augustine, Robert W., Southfield, Mich. (Member Buchanan County Medical Society)
Aulenbacher, Carl E., Washington (Member St. Louis Medical Society)
Auner, Cecil R., Springfield
Averill, Keith H., Kansas City
Avery, Willard B., Boonville
Avila, Estrella Z., Manchester
Avila, Patricio C., Manchester
Avioli, Louis V., St. Louis
Ayata, Sedat M., St. Louis
Aykent, Yavuz, St. Louis
Aylward, Howard J., St. Louis
Ayotte, Nancy C., Kansas City
Ayvazian, Vatche H., St. Louis
Azuma, Nobutaka, St. Louis
Azzouni, J. N., Fenton

B

Babka, Joseph J., St. Louis
Bach, Lysle M., Hannibal
Back, Donald K. Springfield
Backer, Matthias H., Jr., St. Louis
Badger, Virginia M., St. Louis
Baer, Alvin J., Kansas City
Bagby, James W., Clayton
Bagwe, Lata R., St. Louis
Bahn, Charles F., Cape Girardeau
Bai, Sangzin, Festus
Baik, Kil Young, Waverly
Bailey, Alan H., Springfield
Bailey, Drennan, St. Louis
Bailey, William H., St. Louis
Baird, Keim L., St. Louis
Baker, A. Sherwood, Columbia
Baker, Donald L., Union
Baker, James M., Columbia
Baker, Josephine D., Moberly
Baker, Philip J., Kansas City
Baker, Warren C., Savannah
Balanoff, Arnold Z., Kansas City
Baldwin, Richard, Springfield
Baldwin, Theodore R., Excelsior Springs
Bales, Eugene L., Carrollton
Balhuizen, John, Kansas City
Ball, David A., Natchez, Miss. (Member Jackson County Medical Society)
Ballard, V. Bryce, Kansas City
Ballinger, Walter F., II, St. Louis
Balster, Vernon H., St. Louis
Bamshad, Jerry, Hazelwood
Bandle, Donald F., St. Louis
Banet, Samuel R., St. Louis
Banjastikul, Chusak, St. Louis
Bankuti, Ferenc, Kansas City
Bannon, Anne E., St. Louis
Banton, M. Roman, St. Louis
Banton, Thomas J., St. Louis
Banton, William C., St. Louis
Barbee, Charles W., Columbia
Barbo-Mencias, Cristeta, St. Louis
Barbour, Marvin R., Poplar Bluff
Bardsley, John L., St. Louis
Bare, Chester I., Jr., Kansas City
Bare, Edward F., Tarkio
Bareis, Robert J., Marshfield
Barelli, Pat A., Kansas City
Barker, Edward T., St. Louis
Barloon, James H., Kansas City
Barnard, John L., Jr., Kansas City
Barner, Hendrick, St. Louis
Barnes, Seth S., Cape Girardeau
Barnett, Charles H., Bolivar
Barnett, Floyd A., Paris
Barnett, Gordon P., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Barnett, Norman H., Joplin
Barnhill, Floyd R., Springfield
Barone, Paul L., Nevada
Barr, Glenn A., Kansas City
Barragan, Hector, Ballwin
Barrett, Scott R., St. Louis
Barrios, Francisco, St. Louis
Barrow, Jack, St. Louis
Barry, Gerald W., Kansas City
Barry, William B., Kansas City
Bartlett, Robert W., St. Louis
Bartlett, Willard, Jr., St. Louis
Bartnick, Mitchel L., De Soto
Bartulica, Nicholas, St. Joseph
Basantz, Fernando V., Kansas City
Baska, R. E., Kansas City
Bass, Billy J., Salem
Bass, Lewis N., Kansas City
Bass, Walter R., Kansas City
Bates, George C., N. Kansas City (Member Clay County Medical Society)
Battmer, Robert E., Liberty
Baue, Arthur E., St. Louis
Bauer, Harold A., Lockwood
Bauer, John D., St. Louis
Bauer, Joseph A., St. Louis
Bauer, Lafe W., Kansas City
Bauer, Maria, Granite City, Ill. (Member St. Louis Medical Society)
Bauer, Otto, Granite City, Ill. (Member St. Louis Medical Society)
Bauer, Robert A., St. Louis
Baula, Armindo G., St. Louis
Baum, Frank E., Kansas City
Bauman, Henry C., Maryville
Baumann, A. R., Steelville
Baumgarten, Walter, Jr., St. Louis
Bautista, Rogelio L., St. Louis (Member St. Charles-Lincoln County Medical Society)
Bay, Merrill R., Blue Springs
Bazzoui, Widad, Columbia
Bealer, Louis A., Lebanon
Beard, R. Wheatley, Springfield
Beard, William J., Lee's Summit
Beare, J. Byron, St. Louis
Beasley, L. Kenneth, St. Louis
Beato, David L., St. Louis
Beatty, Arch J., Kansas City

° Doctor of Osteopathy.

Beatty, Eugene C., Kansas City
Beatty, Nina D., Kansas City
Beaty, William R., St. Louis
Beck, Calvin E., Kansas City
Beck, Paul M., St. Joseph
Becker, Bernard, St. Louis
Becker, Edward J., St. Louis
Becker, George H., St. Louis
Becker, Richard R., Kansas City
Becker, Rolfe A., Kansas City
Becker, Stanley C., St. Louis
Beckette, Edmund S., St. Louis
Beckloff, Gerald L., Kansas City
Beckman, Donald E., St. Louis
Beecher, Sheldon B., Poplar Bluff
Beene, Thomas K., Columbia
Beheler, Edward M., St. Joseph
Behrens, Donald T., St. Louis
Behrens, Gerald L., St. Louis
Beidle, Raymond J., St. Ann
Beisner, Donald H., Springfield
Belancourt, Dunet F., St. Louis
Belden, Edgar A., Jefferson City
Belew, Joe E., St. Louis
Bell, Hubert H., Kansas City
Bell, Robert M., St. Louis
Bell, William F., Lee's Summit
Benage, Clarence M., Florissant
Bennett, James D., Kansas City
Bennett, Kenneth J., St. Louis
Benoit, Hector Wright, Jr., Kansas City
Benson, John F., St. Louis
Benson, Leo J., Jr., Kennett
Benson, Ronald G., Springfield
Benson, Scott C., St. Joseph
Benson, William F., Kansas City
Bentlage, Charles H., Joplin
Bentley, John D., Springfield
Berard, Louis N., St. Louis
Berenson, Sheldon E., Kansas City
Berg, Edward F., Ladue
Berg, Leonard, St. Louis
Berg, Ralph, St. Louis
Berger, Edward J., St. Louis
Bergman, Hugo F., St. Louis
Bergmann, Dwayne, St. Louis
Bergmann, John F., St. Louis
Bergmann, Martin, St. Louis
Bergmann, Victor H., Kansas City
Bergner, Grace E., St. Louis
Berland, Harry I., St. Louis
Berlin, Roger, Kansas City
Berman, William, St. Louis
Bernabe, Florinio H., Manchester
Bernabe, Ofelia M., Manchester
Bernard, J. W., Caruthersville
Berndsen, Gerard H., Rock Hill
Berney, Francis J., St. Joseph
Berni, Anthony A., St. Louis
Bernreiter, Michael, Kansas City
Bernstein, Aaron M., Clayton
Berry, G. Neill, Kansas City
Berry, John W., St. Louis
Berry, Maxwell G., Kansas City
Berry, Paul T., Springfield
Bersche, Bertram L., St. Louis
Berwald, Irwin I., St. Louis
Best, Robert, Overland Park, Kan.
(Member Lafayette-Ray County Medical Society)
Bettonville, Paul J., Jr., St. Louis
Betz, Richard J., Neosho
Betz, Robert F., Neosho
Bhend, David P., Joplin
Bickel, Vern T., Lamar
Bickley, James E., Kansas City
Biddy, Ralph L., St. Louis
Bidwell, Robert E. G., Kansas City
Bigger, John F., Jr., St. Louis
Biggs, Alfred D., Jr., Kansas City
Biggs, Fred J., Jr., Poplar Bluff
Biggs, Harry L., Kansas City
Bikales, Victor W., Kansas City
Bills, Marvin L., Kansas City
Bilsky, Nathan, St. Louis
Bindbeutel, Donald A., St. Louis
Binder, Morton A., St. Louis
Bingham, Hal G., Columbia
Bircher, John L., St. Louis
Bird, H. Waldo, St. Louis
Birenbaum, Aaron, St. Louis
Birge, Clifford A., St. Louis
Birsner, Frank H., Carthage
Bishop, Marion D., Florissant
Bishop, Mary M., St. Louis
Bisno, Daniel, St. Louis
Black, Don A., Kansas City
Black, Eugene C., Kansas City
Black, Samuel P. W., Columbia
Black, Thomas C., Jr., Kansas City
Blackman, Nathan, Kirkwood
Blackmore, Thomas A., Windsor
Blackwell, Charles R., University City
Blackwell, Charles W., Columbia
Blades, Ross D., Springfield
Bladow, Terrence C., Joplin
Blair, Vilray P., Jr., St. Louis
Blalock, Robert W., Marshall
Blank, Michael K., De Soto
Blankenship, Dale M., Cape Girardeau
Blankenship, George W., Neosho
Blanton, J. C., Sikeston
Bleisch, Virgil R., St. Louis
Blim, Richard D., Kansas City
Bliss, Joy V., Excelsior Springs
Block, Arnold S., St. Louis
Block, J. E., Sedalia
Bloom, W. A., Fayette
Blount, Lee, Jr., St. Louis
Bockelman, Clifford H., Brentwood
Boedeker, Roy V., St. Louis
Boemer, Lilburn C., St. Louis
Boger, James W., Sedalia
Bohigian, George, St. Louis
Bohnsack, Ralph W., Brookfield
Bolch, Oscar H., Jr., St. Louis
Boldizar, Albert G., St. Louis
Boldt, Thomas H., St. Louis
Boles, C. Read, Clayton
Bolinske, Robert E., St. Louis
Bollozos, George D., St. Louis
Bondurant, Bryce H., St. Louis
Bonebrake, M. D., Springfield
Bonfanti, Albert L., St. Louis
Bonifacio, Andres S., Crystal City
Boniuk, Isaac, St. Louis
Bonney, Samuel C., Washington
Boone, Daniel C., Kansas City
Boone, Martin H., Jr., Springfield
Boonshaft, Benje, St. Louis
Bordy, Marvin D., Kansas City
Borenstine, Joseph, Kansas City
Borowsky, Benjamin A., St. Louis
Borsuk, Gregory M., Kansas City
Bortnick, Arthur R., St. Louis
Bortnick, Eugene, Kansas City
Boswell, John R., St. Louis
Botwin, Arnold E., Kansas City
Bouda, David W., Kansas City
Bourgeois, Curtis, Columbia
Boughnou, Harvey P., Kansas City
Bourke, Thomas E., St. Louis
Boutros, Amin, Kansas City
Boveri, Joseph C., St. Louis
Bowdern, Edward H., Richmond Heights
Bowe, Edwin Earl, Jefferson City
Bowen, Stephen F., Jr., St. Louis
Bowerman, Harold H., St. Louis
Bowers, James E., Kirkwood
Bowersox, Warren A., Pacific
Bowles, G. Robert, St. Louis
Bowles, Richard P., Liberty
Bowles, William T., St. Louis
Bowman, Melvin C., Neosho
Bowman, William K., Cape Girardeau
Bowser, John F., Kansas City
Boyarsky, Saul, St. Louis
Boyce, John Milton, Mexico
Boyd, Arthur M., St. Louis
Boyd, George K., Kansas City
Boydston, Catherine, Odessa
Boydston, W. Wayne, Odessa
Boyer, Philip A., Jr., Kansas City
Boylan, Peter C., Kansas City
Bozzo, Raymond J., Washington
Braby, Howard H., Independence
Bradford, John F., Kansas City
Bradley, Frank R., St. Louis
Bradley, Richard V., Clayton
Bradley, William W., Centralia
Bradshaw, W. D., Clinton
Brady, Arthur M., Kansas City
Brady, Harry R., St. Louis
Brady, Hugh S., Concordia
Brams, Jack B., Kansas City
Brand, Earl L., Webster Groves
Brandon, Frederick M., Joplin
Brangle, Robert W., St. Louis
Brasher, Ben H., Lexington
Brasher, Charles A., Mt. Vernon
Braufman, Harvey S., St. Louis
Braverman, Abe E., Kansas City
Braverman, Elliot M., Sedalia
Brazos, John C., Smithton
Bregant, Robert E., Jefferson City
Bremer, Rita, St. Louis
Bremser, Harry L., St. Louis
Brennan, George A., St. Louis
Brennan, Patricia A., St. Louis
Brennan, Raymond J., Chillicothe
Brennan, Robert A., St. Louis
Brennan, Robert V., St. Louis
Brenner, Paul A., Owensville
Brereton, Robert L., Kirkwood
Bricker, Eugene M., St. Louis
Brion, Pacelli E., St. Louis
Brisco, C. William, St. Louis
Briscoe, John R., Maplewood
Bristow, Robert B., St. Joseph
Brizio-Molteni, Loredana, Kansas City
Broaddus, Loren, Springfield
Brodeur, Armand E., St. Louis
Bronson, Shael S., St. Louis
Brooke, Clement E., Columbia
Brookes, Robert D., St. Louis
Brookreson, Alton D., Poplar Bluff
Brookreson, Alton F., Poplar Bluff
Brooks, John E., St. Louis
Brother, George M., St. Petersburg, Fla.
(Member St. Louis County Medical Society)
Broun, Goronwy O., St. Louis
Broun, Goronwy O., Jr., St. Louis
Brown, Adrian J., Kansas City
Brown, Daniel W., San Diego, Calif.
(Member St. Louis Medical Society)
Brown, David W., Springfield
Brown, E. Eugene, St. Louis
Brown, Elwyn S., Kansas City
Brown, Frederick B., Aurora
Brown, Irwin S., Kansas City
Brown, James L., St. Louis
Brown, James M., St. Louis
Brown, James T., Springfield
Brown, John J., Fulton
Brown, Katherine S., Fulton
Brown, Lyman D., Springfield
Brown, Menzie H., Kansas City
Brown, Robert M., Manhattan, Kan. (Member Ozarks Medical Society)
Brown, Robert S., Kansas City
Brown, Seymour, St. Louis
Brown, Violeta O., Kansas City
Brownsberger, Robert H., Appleton City
Broyles, Watkins A., Bethany
Bruce, Helen L., St. Louis
Bruce, Leo A., Sikeston
Brugger, Thomas, St. Louis
Brukardt, Diane, Columbia
Brumm, Lawrence W., Kansas City
Bruner, Claude R., Columbia
Bruner, Robert E., Kansas City
Bruns, Kenneth, St. Louis
Brust, Carl H., Mission, Kan.
(Member Jackson County Medical Society)
Bryan, James H., Clayton
Bryan, William H., Jr., Kansas City
Bryan, William T. K., St. Louis
Bryant, Sydney L., St. Joseph
Bryant, T. J., Kansas City
Buben, Robert W., Hannibal
Buchanan, Barbara N., Kansas City
Buckingham, William, Kansas City
Buckner, Robert C., Kansas City
Buckthorpe, Thelma C., Sikeston
Bucy, James G., St. Louis
Budd, John J., Jr., St. Louis
Budke, Harold A., Kansas City
Buehler, Carl T., Jr., Eldon
Buhler, Victor B., Kansas City
Buie, Bruce R., Kansas City
Bumgarner, James E., Columbia
Bumgarner, Roger W., Columbia
Bunting, Williston P., Kansas City
Burch, John E., Joplin
Burcham, Tom R., Jr., Farmington
Burde, Ronald M., St. Louis
Burdge, Robert E., St. Louis
Burford, Edwin K., Jr., Cape Girardeau
Burford, Thomas H., St. Louis
Burk, E. K., Kansas City
Burke, Robert J., St. Louis
Burkey, Jordan W., Springfield
Burkhart, Charles A., St. Louis
Burkhart, Edward F., St. Louis
Burmeister, R. William, St. Louis
Burns, Francis J., St. Louis
Burns, Francis R., Hannibal
Burns, Thomas W., Columbia
Burnside, Charles R., Kirkwood
Burr, Donald C., St. Louis
Burry, Virgil F., Kansas City
Burst, Donald O., St. Louis
Burstein, Robert, St. Louis
Burton, Dale F., Hannibal
Busby, William E., Jefferson City
(Member Boone County Medical Society)
Busch, Anthony K., St. Louis
Busiek, Erwin F., Springfield
Busiek, Paul J., Springfield
Busiek, Urban J., Springfield
Bussmann, Donald W., St. Louis
Butcher, Harvey R., Jr., St. Louis
Butcher, Robert W., Kansas City
Butler, E. F., St. Joseph
Butler, Patrick L., Joplin
Butsch, Richard H., St. Louis
Butterworth, Nelson S., Kansas City
Butts, James D., Rolla
Byland, Benjamin F., Maryville
Byland, Samuel J., Wellsville

Bynum, William R., Columbia
Byrne, John E., St. Louis
Byrne, Paul A., St. Louis
Byrum, Fritz A., Ballwin

C

Cabal, Edito C., St. Louis
Cabonce, August L., Florissant
Cabral, Galileu, St. Louis
Cabrera, Tomas V., St. Louis
Caciolo, Carlo, St. Louis
Cacioppo, Joseph E., St. Louis
Cadice, John B., St. Louis
Caffrey, Raymond J., Kansas City
Cain, Alvin R., Lamar
Cain, Charles F., Caruthersville
Calderon, Marcos, St. Louis
Caldwell, Fred, Poplar Bluff
Caldwell, John K., Kansas City
Callahan, Donald E., Jennings
Callahan, Joseph D., St. Louis
Callaway, Guy D., Springfield
Callaway, Guy D., Jr., Springfield
Callihan, Charles F., West Plains
Callman, George, St. Joseph
Calodney, Martin M., St. Louis
Calovich, Emery R., Kansas City
Camel, H. Marvin, St. Louis
Camp, Richard V., Jr., Poplar Bluff
Campbell, A. J., Sedalia
Campbell, Cecil S., St. Louis
Campbell, Edward D., Cape Girardeau
Campbell, Frederick B., Kansas City
Campbell, James E., Macon
Campos, Francisco J., St. Louis
Canaan, Samuel A., Jr., St. Louis
Cancelada, Juan, Farmington
Canlas, Emilio M., Poplar Bluff
Cannon, Edward M., St. Louis
Cantor, Harvey E., St. Louis
Canty, Eugene J., St. Charles
Capetti, Alex P., Crane
Cappel, Powel B., St. Louis
Capps, Eugene C., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Carder, George A., Kansas City
Carleton, Charles E., Jr., Farmington
Carlin, Albert L., Stanberry
Carlin, M. Richard, St. Louis
Carlson, Arne E., St. Louis
Carlson, E. C., Poplar Bluff
Carlson, Gabrielle A., St. Louis
Carlson, Hjalmar E., Kansas City
Carlson, John S., Kansas City
Carmona, Gilberto V., Arnold
Carnahan, Charles E., Columbia
Carnell, B. M., Camdenton
Carnes, Victor M., Joplin
Carpenter, George T., St. Joseph
Carpenter, James L., St. Charles
Carpenter, Wallace, Rockport
Carr, Archie D., St. Louis
Carr, Phillip W., Springfield
Carranza, Mauro J., Hillsboro
Carrera, Mario, St. Louis
Carrier, John A., St. Louis
Carrington, Howard W., Lebanon
Carroll, George A., St. Louis
Carroll, Grayson, St. Louis
Carroll, Percy J., Clayton
Carroll, Richard C., Metairie, La. (Member Jefferson County Medical Society)
Carroll, Thomas W., Lamar
Carron, Joseph F., Arnold
Carron, Oscar A., Perryville
Carson, Richard A., Ballwin
Carter, Edwin E., Creve Coeur
arter, Howard, Hamilton
arter, James R., Neosho
arter, John F., St. Louis
artwright, Robert S., Columbia
aruso, Alfred A., Kansas City
ary, John M., St. Louis
asas, Julian R., St. Louis
ase, Mary E. S., St. Louis
ase, William F., Kansas City
asebolt, Buford T., Kansas City
asey, Edwin J., St. Louis
asey, Eliot, Florissant
ash, Charles R., Kennett
ason, Elbert H., St. Louis
aspari, Richard B., St. Louis
assel, Melvin A., St. Louis
astasus, Manuel, St. Louis
astillo, Jose L., Sikeston
astillo, Michael E., Kansas City
astro, Juan M., Creve Couer
atanzaro, Anthony F., St. Louis
atanzaro, Francis J., St. Louis
atanzaro, Rudolph E., St. Louis
attaneo, Ernest A., Kansas City
avanagh, Denis, St. Louis

Cavaness, Ernest W., Encinitas, Calif. (Member Jackson County Medical Society)
Cayabyab, Pedro C., St. Louis
Cejas, Leandro P., Sikeston
Centner, Paul J., Kansas City
Chadaratana, Phadung, St. Louis
Chakrobortty, Hirendra, St. Louis
Chalkley, Judson I., Columbia
Challener, William A., III, St. Joseph
Chambers, James Q., Jr., Kansas City
Chamness, James T., St. Louis
Chand, Suresh, St. Louis
Chandler, Robert A., Kansas City
Chandra, Mahesh D., Independence
Chaplin, Hugh, Jr., St. Louis
Chapman, Charles L., Columbia
Chapman, David W., Independence
Chapman, Jean A., Cape Girardeau
Charles, Benjamin H., St. Louis
Charles, Francois R., St. Louis
Charnas, Raymond M., St. Louis
Chase, Ned B., Jr., Joplin
Chastain, Charles W., Farmington
Chaudhary, Mohammad A., Kansas City
Cheek, Charles W., Columbia
Cheek, J. William, Springfield
Chernoff, Selbert G., Kansas City
Cherre, Anthony J., St. Louis
Cherre, Charles J., St. Louis
Chesanow, Robert L., St. Louis
Chesney, George W., Joplin
Cheuk, Shu-sum, St. Louis
Chiasson, E. Chaille, Columbia
Chieffi, Margaret, St. Louis
Childs, Donnalea S., Kansas City
Childs, Richard M., Kansas City
Chiles, David R., Smithville
Chinsky, Murray, St. Louis
Chipongian, Raul A., Florissant
Chishti, M. Ishaq, St. Louis
Cho, Kyu S., St. Louis
Chou, Yen Ping, Koch
Choudhuri, Ajit Kumar, St. Louis
Christ, Martin H., St. Joseph
Christensen, Roger F., Louisiana
Christianson, Charles S., Mt. Vernon
Christy, John P., Poplar Bluff
Christy, Raymond A., Springfield
Chung, Kap Eun, St. Louis
Chung, Richard T., Kansas City
Chung, Tzi-Chorng, Kansas City (Member St. Louis Medical Society)
Chute, W. Deward, Moberly
Ciapciak, Stanley J., St. Louis
Clark, Irving H., Kansas City
Clark, Kendall A., Jefferson City
Clark, Richard E., St. Louis
Clarke, Michael J., Springfield
Clary, William F., Springfield
Claseman, Wilma W., St. Louis
Clasen, Arthur C., Miami Beach, Fla. (Member Jackson County Medical Society)
Clawson, James W., Springfield
Clayton, Edgar L., Springfield
Cleary, Frank, St. Louis
Clendenin, William W., St. Louis
Clever, Henry W., Jr., St. Charles
Cline, Harold H., Piedmont
Cline, Merle A., Kansas City
Clisham, John F., Hannibal
Clothier, Robert W., Independence
Clough, Charles A., Kansas City
Coates, Thomas A., St. Louis
Cobb, James R., Kansas City
Coben, Lawrence A., St. Louis
Coburn, Donald F., Kansas City
Cochran, Donald Q., Columbia
Cochran, Jo R., Cape Girardeau
Cochran, Thomas E., Jr., Springfield
Cochrane, Joseph J., Kansas City
Cockerell, Sanford F., Independence
Codilla, Sostenes G., St. Louis
Coffee, Amos L., Willow Springs
Cofer, T. N., Chillicothe
Coffey, Ralph R., Kansas City
Coffin, Theodore A., Kansas City
Coffman, Esther E. L., Lakeworth, Fla. (Member Ozarks Medical Society)
Cohen, Benjamin H., Clayton
Cohen, Frank, St. Ann
Cohen, Harry K., Kansas City
Cohen, Hillard K., St. Ann
Cohen, Robert A., Kansas City
Cohen, Robert S., St. Louis
Cohle, Richard R., Carthage
Cohrs, Clarence C., Moberly
Cokingtin, Leovigildo, Independence
Cokrhame, Jack, Florissant
Colbert, Robert S., Sikeston
Cole, Robert R., St. Louis
Cole, William R., Smithton

Colglazier, Mary C., Kansas City
Coller, Frederick B., Springfield
Collins, Gretchen D., Macon
Collins, John A., St. Louis
Collins, John M., St. Louis
Collodi, George A., St. Louis
Colom, George A., Kansas City
Colosi, Nicholas J., St. Louis
Colwill, Jack M., Columbia
Comas, Manuel R., Manchester
Comeau, Richard A., Dexter
Comens, Phillip, St. Louis
Comens, Ruth C., St. Louis
Comer, J. Russell, Hannibal (Member Marion-Ralls-Shelby County Medical Society)
Commerford, John F., St. Charles
Compton, James R., Sarasota, Fla. (Member St. Louis County Medical Society)
Cone, Alfred J., Chesterfield
Conley, William R., Ann Arbor, Mich. (Member St. Louis County Medical Society)
Connell, Evan S., Kansas City
Connelly, Michael W., Florissant
Conrad, Adolph H., Jr., Clayton
Conrad, Joseph A., Chillicothe
Conrad, Marshall B., St. Louis
Conrad, Raymond C., Springfield
Cook, James R., Springfield
Cook, Jerry W., Kansas City
Cook, Marvin A., Florissant
Cook, O. W., Caruthersville
Cook, Thomas B., Richmond
Cooper, Charles S., Kansas City
Cooper, Charles W., Jefferson City
Cooper, Claude W., Thayer
Cooper, Henry T., St. Louis
Cooper, James F., Florissant
Cooper, Maurice E., Columbia
Cooper, R. Lee, Warrensburg
Cooper, Robert S., II, Warrensburg
Cooper, Theodore, Bethesda, Md. (Member St. Louis Medical Society)
Cooper, Thomas J., St. Louis
Cooper, Thomas P., St. Louis
Cope, James C., Columbia
Cope, Joseph S., Lexington
Copp, Ralph, St. Louis
Coppinger, Thomas A., Kansas City
Corday, Robert J., St. Louis
Cordonnier, James K., Springfield
Cordonnier, Justin, St. Louis
Coronado, Mario A., St. Louis
Corry, Francis M., Springfield
Cortez, Willie S., Lebanon
Cortner, Mary C., Kansas City
Corvalan, Juan C., St. Louis
Costa, Dominic V., St. Louis
Costello, Cyril J., St. Louis
Costello, Joseph P., Jr., Brentwood
Costen, William S., St. Louis
Costrino, Joseph A., St. Louis
Cottey, J. H., Mexico
Coulson, Forest H., Cape Girardeau
Courter, Larry P., Jefferson City
Cowan, George A. B., Kansas City
Cowdry, Edmund V., Jr., Creve Coeur
Cox, John P., St. Joseph
Cox, Kenneth E., Kansas City
Cox, Mary E., St. Louis
Cox, Robert D., St. Louis
Cox, William A., Jefferson City
Cox, William L., Liberty (Member Jackson County Medical Society)
Coxe, William S., St. Louis
Cozart, Duane E., Chesterfield
Cozean, Charles H., Jr., Cape Girardeau
Craft, George A., Columbia
Craig, Alan G., St. Louis
Craig, Irwin T., Joplin
Craig, Owen W. D., St. Joseph
Craig, Richard O., St. Joseph
Craig, Ronald D., Perryville
Crain, James W., Branson
Cramer, Quentin, Parkville
Crane, John Bruce, Springfield
Crawford, Archie L., Joplin
Crawford, Katherine J., University City
Crawford, Oral B., Springfield
Crawford, Robert M., Sullivan
Crayton, Billy G., Waverly
Creech, Joseph C., Troy
Cremer, William J., Fulton
Crespin, Stephen R., St. Louis
Crespo, Horacio T., Florissant
Crespo, Remedios R., Florissant
Crider, Russell J., St. Charles
Crighton, John C., Springfield
Criscione, James R., St. Louis
Criscione, James S., St. Louis

Crispell, Lawrence S., Joplin
Critchlow, Wm. C., Sikeston
Crocker, Albert M., Kansas City
Crockett, James E., Kansas City
Croom, Dorwyn W., Malden
Cross, Albert D., Trenton
Cross, Edward B., Kansas City
Crossman, Robert W., Webster Groves
Crouch, F. Richard, Farmington
Crow, Martin L., Kansas City
Crowe, John T., Cape Girardeau
Crowell, Hugh C., St. Louis
Crowley, Wm. J., Jr., Columbia
Crozier, Franklin A., Richmond
Cruz, Eligio C., St. Louis
Cruz, Sergio G., Jr., Monett
Csaki, Bela, Kansas City
Cubillo, Enrique, St. Louis
Cuento, Oblendo A., St. Louis
Culbertson, William F., Kansas City
Culley, Thomas S., Columbia
Cullum, Albert G. J., Middlesboro, Ky. (Member St. Louis County Medical Society)
Cunningham, Darral D., Springfield
Cunningham, E. J., Jr., St. Louis
Curran, Desmond, Kansas City
Curran, Kevin E., Kansas City
Curry, Michael J., St. Charles
Curts, Calvin J., Kansas City
Cutcliff, Daniel J., Kansas City
Cutler, Harold M., St. Louis
Cutler, Harry, St. Louis
Czebrinski, Edward W., St. Louis

D

Daake, John W., St. Louis
Dabbs, Wilbur D., Neosho
Dagartzikas, A. K., Town & Country
Dahm, Charles H., Jr., St. Louis
Daley, Frank R., Hamilton
Daley, Phillip G., St. Louis
Dalton, Arthur R., St. Louis
Dalton, Timothy T., Kansas City
Dames, Richard J., St. Louis
Damron, Edward O., Elsberry
Damron, Oscar H., Warrensburg
Danforth, William H., St. Louis
Danis, Peter G., St. Louis
Danis, Richard K., St. Louis
Dankner, Arnold, St. Louis
Dann, David S., Kansas City
Darnell, Dale E., Kansas City
Darnell, Thomas F. B., Columbia
Dash, Udava N., St. Louis
Datta, N. K., Bonne Terre
Daughaday, William H., St. Louis
Daum, Harold F., Sedalia
Daut, Donald W., Mexico
Davault, George K., Richmond
Davidson, Kendrick C., Leawood, Kan. (Member Jackson County Medical Society)
Davidson, Morris, Clayton
Davis, C. Braxton, Nevada
Davis, Charles S., Joplin
Davis, David, Columbia
Davis, Donald R., Kansas City
Davis, Edgar W., St. Louis
Davis, Gustave L., St. Louis
Davis, Herbert V., Kansas City
Davis, Jack M., Kansas City
Davis, John J., Overland Park, Kan. (Member Jackson County Medical Society)
Davis, Kenneth A., Kansas City
Davis, Landis Y., Canton
Davis, Leonard L., Jr., Mexico
Davis, Martin W., St. Louis
Davis, Mary A., St. Louis
Davis, Wilbur L., Charleston
Davisson, Walter F., Jefferson City
Dawley, John, St. Louis
Dawson, Richard, Oklahoma City, Okla. (Member Boone County Medical Society)
Day, Maxwell, McAllen, Texas (Member Buchanan County Medical Society
Deakin, Rogers, St. Louis
Dean, Francis D., Fayette
Dean, Lee W., Jr., St. Louis
Decanini, Mario, St. Joseph
Deeken, James H., Kansas City
De Feo, Theodore C., Kansas City
DeGenova, Gerald H., Ste. Genevieve
Deitchman, Robert B., St. Louis
De Jesus, Alberto, St. Louis
de la Torre, John J., Sullivan
Del Carmen, Jaime J., Maryland Heights
DeLeon, Romualdo V., Arnold
Deles, Vicente D., Crystal City
Deleste, Carlos J., St. Louis
Deligeorges, John, Kansas City
Del Pizzo, Ferdinand, St. Charles
Del Rosario, Horacio O., St. Louis
Del Valle, Fernando, St. Louis
DeMaria, Peter F., Kansas City
DeMott, John D., Kansas City
DeMotte, John A., Kansas City
Dempsey, Herbert A., Lee's Summit
Denk, Alan F., St. Louis
Denney, Richard W., Mountain Grove
Denninghoff, James C., Columbia
Dennis, W. Paul, Flat River
Dennison, Carl F., St. Louis
Denny, Hubert M., Union
Dent, George W., Jr., Farmington
Denton, Robert E., Smithville
Demoncourt, John E., Smithville
DeTar, Burleigh E., Joplin
Dettmer, Robert F., Ironton
de Ungria, Estelita Maria, St. Louis
de Ungria, Pablo Calma, St. Louis
Deutch, Max, St. Louis
de Vera, Anson E., St. Louis
Devgan, Baldev K., St. Louis
Devine, John B., St. Louis
Devine, Mark W., Jr., Kansas City
Devins, George S., Kansas City
DeVivo, Darryl C., St. Louis
Dewald, Paul A., St. Louis
DeWeese, Marion S., Columbia
Dewein, Edward G., St. Louis
Dexheimer, Frank R., Columbia
Dexter, James D., Columbia
Deyton, John W., St. Louis
Dick, Earl, Cherry Hill, N. J. (Member St. Louis Medical Society)
Dickler, Donald J., St. Louis
Diehr, Maurice A., St. Louis
Diekroeger, Manuel L., Boonville
Diemer, Peter A., Kirkwood
Dierker, H. D., Farmington
Dierker, LeRoy J., St. Louis
Diestelhorst, James A., Hazelwood
DiLeo, Senatro W., Florissant
Dillard, Burl M., St. Louis
Dillard, Erin M., Springfield
Dills, Joseph N., Springfield
Dimond, E. Grey, Kansas City
Dinelli, Frank E., Poplar Bluff
Dinkins, James A., Cape Girardeau
Diveley, Rexford L., Kansas City
Dixon, George D., Kansas City
Dixon, John R., Brookfield
Dixon, Vewiser L., Kansas City
Dlabal, Luke J., Independence
Dmytryk, Eugene T., St. Louis
Doane, William L., Grandview
Dodge, Mark, Kansas City
Dodge, Philip R., St. Louis
Doering, Robert W., Kansas City
Doisy, Philip P., St. Louis
Doisy, Robert A., Glendale
Dolan, C. Terrance, N. Kansas City (Member Clay County Medical Society)
Dolan, Daniel L., Springfield
Dolan, John T., Jr., St. Louis
Domann, Darrel D., Springfield
Domke, Herbert R., Jefferson City (Member Callaway County Medical Society)
Donaldson, Robert C., St. Louis
Donati, Robert M., St. Louis
Donegan, Judith H., Columbia
Donegan, William L., Columbia
Donley, Leo F., Jr., St. Louis
Donley, Robert R., Monett
Donnell, Harold E., De Soto
Donnell, Robert H., Crystal City
Donnell, Thomas A., De Soto
Dooley, Joseph M., Jr., St. Louis
Dorsch, Ervin H., Independence
Dorton, Robert K., St. Louis
Doucette, Raymond C., St. Louis
Dowell, Donald M., Chillicothe
Dowell, J. Larry, Pattonsburg
Downey, James W., Kansas City
Downey, Jon Patrick, Cape Girardeau
Doyle, Charles R., St. Louis
Doyle, Matthew J., Jefferson City
Drace, Charles C., Jr., St. Louis
Drake, Avery A., Rolla
Drake, Roy F., Kansas City
Drake, William L., Jr., St. Louis
Draney, Thomas E., Kansas City
Draper, Bernard, Rolla
Dreher, Richard L., Kansas City
Drescher, Emmett B., St. Louis
Drews, Robert C., St. Louis
Drey, Norman W., St. Louis
Dreyer, Carl J., Webster Groves
Dreyer, Philip V., Huntsville
Dreyer, William F., Houston
Drisko, Robert M., Kansas City
Drowns, Bruce V., Kansas City
Drum, Helen M., St. Louis
Drury, Lawrence R., Kansas City
Dubuque, Theodore J., Jr., St. Louis
Duckworth, Gordon L., Jr., Hayti
Duemler, John H., St. Louis
Duemler, Robert H., Kirkwood
Duer, Mildred C., Kansas City
Duffy, Francis G., St. Louis
Duffy, Oliver F., Trenton
Duggan, John J., Jr., Kirkwood
Dukstein, Walter G., Kansas City
Dulick, Michael, Brentwood
Duling, Gerald J., St. Charles
Dumadag, Virgilio P., Chesterfield
Dumonceaux, Leonard J., St. Charles
DuMont, Clement C., St. Joseph
DuMontier, R. J., O'Fallon
Dunaway, Howard A., Sikeston
Duncan, David, St. Charles
Duncan, Robert D., Springfield
Duncan, Wm. H., Kansas City
Dunham, Robert H., N. Kansas City
Dunleavy, James D., Kansas City
Dunmire, George Q., Kennett
Dunn, Robert E., St. Louis
Dunshee, Robert E., Maryville
DuPont, Jean-René, Sikeston
Durnell, Monaford D., Lee's Summit
Durr, Jon W., Columbia
Durst, Henry, Fulton
Dworkin, Saul, St. Louis
Dwyer, Frank X., Kansas City
Dwyer, Hugh L., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Dwyer, Richard M., Glendale, Calif. (Member St. Louis Medical Society)
Dwyer, Thomas L., Mexico
Dyer, Dallas J., St. Louis
Dyer, Gary A., Columbia
Dzundzev, Penco, St. Louis

E

Eachempati, Rama G., St. Louis
Eades, Dee W., St. Louis
Eades, Joseph W., St. Louis
Eagleton, Mark D., St. Louis
Earp, Ralph K., St. Louis
Ebel, Eugene H., Florissant
Eber, Carl T., St., Louis
Eberle, Vincent L., St. Louis
Echterhoff, Harry R., St. Louis
Eck, Birkle, St. Louis
Ecker, Decider, Pacific
Eckert, Clarence T., Sarasota, Fla. (Member St. Louis Medical Society)
Ecklund, Archibald M., San Diego, Calif. (Member St. Louis Medical Society)
Ector, Henry J., Mexico
Edele, Eugene H., St. Louis
Edelman, Alan H., St. Louis
Edmond, Beauvoir H., St. Louis
Edmonds, Robert W., Sedalia
Edwards, D. R., Sedalia
Edwards, Donald E., Cape Girardeau
Edwards, Francis L., Lamoni, Ia. (Member Ozarks Medical Society)
Edwards, James E., St. Louis
Edwards, Joseph C., St. Louis
Edwards, Theodore F., Kansas City
Edwards, Waldo B., Kirkwood
Efstathianos, Kimon, St. Louis
Egan, Robert C., St. Louis
Egan, Thomas F., St. Louis
Egea, Fernando M., Overland Park, Kan. (Member Jackson County Medical Society)
Eggers, George W. N., Jr., Columbia
Eggleston, Donald E., Macon
Eggleston, Thomas F., St. Louis
Ehrlich, Carl F., Jr., Ballwin
Eidelman, Jack R., St. Louis
Eigel, Edwin G., St. Louis
Eimer, Charles E., St. Louis
Eisemann, Gustave, Kansas City
Eisen, Arthur Z., St. Louis
Eisenmann, Benjamin P., New Haven
Ekern, H. Peter, Mexico
Eklund, Alfred W., Pleasant Hill
Eldenburg, Donald, Sedalia
Elders, Frank A., Jr., Cuba
Elias, David J., Independence
Eliasson, Sven G., St. Louis
Eliscu, Juliette, Joplin
Elkadi, Ahmed, Springfield
Elkins, Ronald F., Springfield
Eller, C. Howe, Clayton
Ellersieck, Dorothy M., St. Louis
Ellett, William H., Appleton City
Ellfeldt, Howard J., Kansas City
Elliott, Raymond G., Kansas City
Elliott, Wade E., Kansas City
Ellis, Francis J., Springfield
Ellis, Harry L., Springfield

Ellison, Leroy E., Warren, Ark. (Member St. Louis County Medical Society)
Ellsasser, James C., St. Louis
Ellsworth, Willard, Cainsville
Elrod, Dennis B., Cape Girardeau
Elser, Otto H., Independence
Elson, Julius, St. Louis
Emerson, Reynolds L., St. Louis
Emery, Frank E., Springfield
Empson, Charles L., Kansas City
Engel, Lawrence P., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Engelhardt, Robert C., Poplar Bluff
Engelmann, Calvin E., Kansas City
Engleman, Reinhold, Kansas City
English, Milton T., Jr., Kirksville
English, Wallace D., Cardwell
Ericcson, Samuel E. F., Kansas City
Erickson, H. John, Sedalia
Ernst, Edwin C., Jr., St. Louis
Ernst, Joseph G., St. Louis
Ernst, Richard E., St. Louis
Ernst, Roland P., St. Louis
Escobedo, Bolivar M., St. Louis
Eshelman, Albert D., Independence
Esparrago, Francisco R., Jr., Monett
Esslinger, Arthur T. J., St. Louis
Essmyer, Joseph K., Cape Girardeau
Estes, Albert M., Cape Girardeau
Estes, Jack M., St. Louis
Esther, John R., Joplin
Estrada, Corazon deLeon, St. Louis
Estrada, Jesus I., St. Louis
Etienne, Robert B., St. Louis
Eto, Jackson, St. Louis
Eubank, David F., Kansas City
Eubank, Dillard M., Raytown
Eubank, William R., Kansas City
Eubank, William Y., Kansas City
Eugenio, Romeo R., Perryville
Evans, Elizabeth A., Kansas City
Evans, Ezra L., Jr., Springfield
Evans, Lawrence L., Kansas City
Evens, Ronald G., St. Louis
Everett, James E., Kansas City
Eversoll, Norton J., Hollywood, Fla. (Member St. Louis County Medical Society)
Exarhou, Klark, Florissant
Exon, C. Stuart, Jefferson City
Eyerman, Edward L., Jr., St. Louis
Eyermann, Charles H., St. Louis
Eyermann, H. Walter, Warrenton

F

Fabian, Leonard W., St. Louis
Fabito, Daniel C., Manchester
Fabito, Melinda A., St. Louis
Fair. William L., Chillicothe
Fairchild, James F., Perryville
Fairchild, Robert C., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Fakhoury, Donald A., Kansas City
alk, O. P. J., St. Louis
allon, Richard H., St. Louis
arley, Claude C., Kansas City
armer, Norma D., Farmington
arney, Jacob P., Kansas City
arnham, Milo M., Independence
arnsworth, Jesse J., Kansas City
arrell, Frank W., St. Louis
arrell, Robert J., St. Louis
arrell, S. L., Washington
arthing, Gene W., Springfield
ayez, Jamil A., Kansas City
ayne, Fred A., Kansas City
ee, Chester F., Kansas City
eeley, Donald R., Ballwin
ehlman, Bernard F., Jr., St. Louis
eigin, Ralph D., St. Louis
eind, Earl E., Rolla
einstein, Leon A., St., Louis
eist, George V., Kansas City
eist, Wm. Edgar, Kansas City
elder, James P., St. Charles
eldman, David, St. Louis
elix, Robert H., St. Louis
eller, Harold H., St. Louis
ellhauer, Carl M., St. Louis
elts, James A., St. Louis
eltz, Lawrence W., Perryville
erguson, Donald S., Kansas City
erguson, John L., Springfield
erguson, John P., Jr., Springfield
erguson, L. H., Jr., Alexandria, La. (Member Jasper County Medical Society)
erguson, Luther J., St. Joseph
erguson, Ralph L., Joplin
erguson, Robert M., Joplin
Ferguson, Thomas B., St. Louis
Ferguson, Wilson J., Sikeston
Ferneau, James E., Columbia
Ferrara, John P., Chesterfield
Ferrell, Thomas E., Jr., Springfield
Ferrendelli, James A., St. Louis
Ferris, Cari R., Kansas City
Ferro, Anthony L., St. Louis
Ferry, Richard J., St. Louis
Fetick, Paul G., St. Louis
Files, James B., Jefferson City
Finger, Donald H., St. Louis
Fingerhood, Marvin G., St. Louis
Fingert, Hyman H., St. Louis
Fink, LeRoy L., Florissant
Finkel, Barney W., St. Louis
Finkle, Robert H., Independence
Finley, Freeman L., St. Louis
Finn, Murray E., St. Louis
Finnegan, Joseph V., St. Louis
Fischer, Charles K., St. Louis
Fischer, Edward H., Kansas City
Fischer, Erich, St. Louis
Fischer, John R., Clayton
Fischer, Jose, Shawnee Mission, Kan. (Member Clay County Medical Society)
Fischer, Martin J., St. Joseph
Fischer, Theodore, Altenburg
Fischer, Thomas J., Hannibal
Fish, Richard., St. Louis
Fish, Virgil O., St. Louis
Fisher, Joseph L., St. Joseph
Fisher, Stanley D., Sedalia
Fishman, John J., St. Louis
Fishman, Marvin A., St. Louis
Fitch, C. H. Max, Springfield
Fitch, Coy D., St. Louis
FitzGerald, Leo P., St. Louis
Fitzgerald, Robert H., Kansas City
Fitzgerald, William T., St. Louis
Fivian, Gerald J., St. Louis
Flance, Israel J., St. Louis
Flanders, Virgil E., Leawood, Kan. (Member Clay County Medical Society)
Flanigan, George D., Jr., St. Louis
Flatley, John A., Kansas City
Flavan, David B., St. Louis
Fleishman, Alfred, St. Louis
Fleming, J. Will, Moberly
Fleming, Robert J., St. Charles
Fleming, Thomas S., Moberly
Fletes, James W., St. Louis
Florendo, Purificacion T., St. Louis
Flores-Vega, Carlos H., St. Louis
Floro, Mariano N., Florissant
Flotte, Bernard H., St. Louis
Flotte, Sylvester A., Florissant
Flynn, Edward P., St. Louis
Flynn, James M., Kansas City
Flynn, John T., St. Louis
Flynn, Joseph E., St. Louis
Flynn, Thomas T., St. Louis
Fogarty, William M., Jr., St. Louis
Fogerson, Virginia L., Springfield
Fogle, Philip R., Springfield
Folck, William P., Kansas City
Folkner, A. L., Warrensburg
Foote, Jerry E., Columbia
Ford, Lee T., Jr., East St. Louis, Ill. (Member St. Louis Medical Society)
Ford, William, Farmington
Foreman, Phillip B., Hannibal
Forgrave, Leon P., St. Joseph
Forman, George W., St. Joseph
Forman, Louis H., Kansas City
Forsen, James A., Gower
Forsman, Waldo W., Jr., St. Louis
Forster, Armand C., St. Louis
Forsyth, B. Todd, St. Louis
Forsythe, Lees C., Kansas City
Forsythe, Robert W., Kansas City
Forti, John J., St. Louis
Fotopoulos, Chris K., North Kansas City
Fouts, Dallas B., Sr., Lees Summit
Fowler, Fred D., Kansas City
Fowler, I. Charles, N. Kansas City
Fowler, James W., Kansas City
Fowler, Marvin L., West Plains
Fox, Gerald E., St. Joseph
Fox, Leon J., St. Louis
Fox, Robert E., St. Louis
Francis, William C., Springfield
Francisco, Clarence B., Kansas City
Franco, Pilar Juan, Kansas City
Frank, Alvin R., St. Louis
Franklin, Curtis U., Kansas City
Franklin, Harold A., St. Louis
Franklin, Max S., St. Louis
Fraser, Daniel M., St. Louis
Fraser, Richard A., Poplar Bluff
Frawley, Thomas F., St. Louis
Frazier, Robert E., Columbia
Frazier, Robert L., Charleston
Frederick, Raymond O., St. Louis
Freedman, Harold, St. Louis
Freedman, Ruth S., St. Louis
Freeman, David M., St. Louis
Freeman, Jerry C., Kansas City
Freeman, Spencer L., Kirksville
Freiheit, Harold J., St. Louis
Freiman, S. Michael, St. Louis
Freimuth, L. E., St. Louis
Frein, Donald E., Harrisonville
Freund, Samuel J., St. Louis
Frick, John P., Kansas City
Friedman, Bernard, St. Louis
Friedman, Ira J., St. Louis
Friedman, Morris L., Kansas City
Friedman, Paul L., St. Louis
Friedman, Robert H., St. Louis
Friedrich, Ernst R., St. Louis
Fries, Armand D., St. Louis
Fries, John W., St. Louis
Friskel, Arthur K., St. Louis
Fritsch, Andrew J., Joplin
Fritzlen, Thomas J., Kansas City
Froelich, Edwin J., Lebanon (Member St. Louis County Medical Society)
Froelich, R. W., Lebanon
Frueh, Bartley R., Columbia
Frumson, Guy H., St. Louis
Fryer, Minot P., St. Louis
Fuchs, George J., Barnett
Fuchs, George J., Jr., Columbia
Fuhrman, Donald L., Kansas City
Fujita, Milton T., St. Louis
Fuleihan, Farid, St. Louis
Fulks, Richard B., California
Fullgrabe, Emil A., Jefferson City
Funsch, Robert E., St. Louis
Furla, Gus J., St. Louis
Furlow, Leonard T., Crystal River, Fla. (Member St. Louis Medical Society)
Fury, Tex E., Kansas City
Fuson, Levi H., St. Joseph
Fuson, William A., Trenton

G

Gaffney, Caldwell J., St. Louis
Gafney, George T., St. Louis
Gagliardo, Joseph, St. Louis
Gaines, Albert, Kansas City
Gaines, Quentin M., Kirkwood
Gainey, Harold L., Kansas City
Gaitonde, Mangesh R., Kansas City
Galbol, Harley, Excelsior Springs
Galbreath, Ashford M., Kansas City
Gale, Arthur H., Overland
Gale, Joseph F., Chillicothe
Gale, Philip R., St. Louis
Galeota, William R., Columbia
Galinsky, Leon J., Republic
Gall, Ira, St. Louis
Gallagher, Lionel M., California
Gallagher, Neil I., St. Louis
Galvez, Sisenande P., Jr., Marceline
Gammel, George E., Columbia
Gandlmayr, Jack M., St. Louis
Gansloser. Wilbert M., Clayton
Gantner, George E., Jr., St. Louis
Gantz, John A., St. Louis
Garcia, Charles L., Mexico
Garcia, Francisco, St. Louis
Gard, Raymond F., Wichita, Kan. (Member Jackson County Medical Society)
Gardner, Joseph A., Joplin
Gardner, Joseph W., Kimberling City
Garfinkel, Bernard T., St. Louis
Garner, James H., Kansas City
Garner. Lynn M., Jefferson City
Garner, Royal S., Jefferson City
Garrett, Glen H., Columbia
Garrison, David L., St. Joseph
Garrison, Norman A., Jr., Kennett
Garrison, Roy F., Kansas City
Garrison, T. W., Camdenton
Garotto, Lewis J., Columbia
Gary, George, Marceline
Gaskins, John H., Kansas City
Gass, Michael, Adidome, V. R. Ghana (Member St. Louis Medical Society)
Gaston, Lamont W., St. Louis
Gaston, Samuel Lee, Joplin
Gauer, Robert J., Kansas City
Gaunt, Frank P., Webster Groves
Gaunt, William D., Columbia
Gauthier, Charles P., Kansas City
Gay, Elizabeth K., Florissant
Gearhart, David L., St. Louis
Gearhart, Merriam, Bethany
Gearhart, Wilbur H., St. Louis
Gedney, William B., Valley Park
Geha, Alexander S., St. Louis
Geha, Braham J., Kansas City

Doctor of Osteopathy.

Geiger, William A., Jr., Kansas City
Geise, August W., Jr., St. Louis
Gellman, Elliott F., St. Louis
Gempel, Paul A., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Gentry, Enoch N., Jr., Kansas City
Gentry, Marvin C., Ava
Gentry, Merritt L., Jefferson City
Gentry, Michael A., Springfield
Gentsch, Kenneth W., Glendale
George, Theodore, Marceline
Gerdes, John A., Springfield
Gerdes, Joseph R., Kansas City
German, Walter A., Jr., Springfield
Germann, Donald R., Kansas City
Germuth, Frederick G., Jr., St. Louis
Gernstetter, Sangwill L., Poplar Bluff
Gerst, Aloysius C., Florissant
Giannellis, C., St. Louis
Gibson, David M., Kansas City
Gibson, Helen F., St. Louis
Gibstine, Marvin H., St. Ann
Giddings, Frank C., Springfield
Giem, Ross N., Pasadena, Calif. (Member St. Louis County Medical Society)
Gieselman, Ralph V., St. Louis
Giesler, Donald H., Osceola
Giffin, James M., Springfield
Gifford, Christopher G., Sikeston
Gilani, Abdollah, N. Kansas City (Member Clay County Medical Society)
Gildea, Edwin F., St. Louis
Gildea, Margaret C. L., St. Louis
Gilden, Jerome J., St. Louis
°Gilgore, Alfred, Kansas City
Gillen, Billy A., Kansas City
Gillespie, William J., St. Louis
Gilliland, Charles E., Cameron
Gillispie, Roy, Branson
Gilpin, Doris C., St. Louis
Gilula, Louis A., St. Louis
Ginardi, Donald E., Kansas City
Ginsberg, Norman A., Kansas City
Giraparnont, Bang Orn, Clayton
Giraparnont, Prabhak, St. Louis
Gish, Rutledge, Fulton
Gist, William W., Kansas City
Givler, Robert L., Kansas City
Gladney, John H., St. Louis
Glasgow, David S., Crystal City
Glass, Robert L., Columbia (Member Pettis County Medical Society)
Glass, William J., Jr., Monett
Glasscock, Ernest L., Prairie Village, Kan. (Member Jackson County Medical Society)
Glazer, Melvin L., Kansas City
Glover, Jack F., Springfield
Glover, Kenneth, Mt. Vernon
Gnade, Albert J., St. Louis
Gniwesch, Jack Maurice, St. Louis
Goebel, Joan M., St. Louis
Goell, Robert S., St. Louis
Goldberg, Isadore E., Braymer
Goldenberg, Sidney, University City
Goldenson, Max J., St. Louis
Goldfarb, Alvin, St. Louis
Goldkamp, John D., St. Charles
Goldman, Alfred, St. Louis
Goldman, Arnold M., St. Louis
Goldman, Hyman J., St. Louis
Goldman, Melvin L., St., Louis
Goldman, Stanley L., Kansas City
Goldring, Sidney, St. Louis
Goldsich, Edward, Kansas City
Goldstein, Marcy A., St. Louis
Goldstein, Marvin F., Kansas City
Gollub, Samuel W., St. Louis
Gomez, Cesar A., Jr., St. Louis
Gonzalez, M. Garza, Warrensburg
Goodman, J. N., Hardy, Arkansas (Member St. Louis County Medical Society)
Goodman, Nathaniel, St. Louis
Goodrich, Harold A., Webster Groves
Goodson, Wm. H., Jr., Kansas City
Goodwin, Donald W., St. Louis
Goolsbee, Robert L., Kansas City
Gordon, James S., Jefferson City
Gordon, Morris P., Kansas City
Gore, Glenn L., St. Charles
Gorelick, David F., Springfield
Gorla, Wayne O., St. Louis
Gose, Don F., Springfield
Gottsch, Joseph C., Kansas City
Gowdamarajan, Rengasamy, Kansas City
Gowler, Douglas R., St. Louis
Grabau, Gene H., St. Louis
Grable, James D., Portageville
Grabowski, Marie H., Kansas City
Grabske, Charles F., Independence
Grabske, Charles F., Jr., Independence
Graff, Ralph J., St. Louis
Graham, Patrick G., Kansas City
Graham, Wallace H., Kansas City
Graneto, Joseph A., St. Louis
Grant, Claude S., St. Joseph
Grant, John M., St. Louis
Grant, Neville, St. Louis
Grant, Samuel B., St. Louis
Graul, Elmer G., St. Louis
Graul, Walter P., St. Louis
Graves, Arthur J., Mt. Vernon
Gray, Mary Louise, St. Louis
Gray, Walter C., St. Louis
Grebel, Clement B., St. Louis
Green, J. Richard, Independence
Green, Manuel E., St. Louis
Green, Morton R., Belleville, Ill. (Member St. Louis Medical Society)
Green, William R., St. Louis
Greenberg, Charles, Los Angeles, Calif. (Member Buchanan County Medical Society)
Greene, Harry L., Hannibal
Greene, W. Wallace, Kansas City
Greenlund, Nelson, Nevada
Greenman, Marshall B., St. Louis
Gregory, John G., St. Louis
Gregory, Ralph W., Kansas City
Gresick, Robert J., St. Louis
Griege, Charles W., Florissant
Griffin, Donald R., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Griffin, Evelyn, Buffalo
Griffin, Olin A., Jr., Buffalo
Griffin, William T., Columbia
Griffith, John A., Jr., Kansas City
Griggs, James Y., St. Louis
Grim, Edward M., Columbia (Member North Central Counties Medical Society)
Grimes, Manning E., St. Joseph
Grindon, Joseph B., St. Louis
Grinstein, Alberto, St. Joseph
Groce, George, Fulton
Gronau, Axel R., St. Louis
Grossman, Marvin, Fredericktown
Grove, Gulp W., Knobnoster
Growdon, John A., Kansas City
Grubb, Paul H., Joplin
Gruenfeld, Gerhard E., St. Louis
Grundmann, William H., St. Louis
Grunt, Jerome A., Kansas City
Guastello, Mario I., Kansas City
Gubin, Alan S., Caruthersville
Guccione, Joseph B., St. Louis
Guhleman, Henry V., Jr., Jefferson City
Guldner, Edmond, Lamar
Gulick, Charles R., St. Louis
Gullett, Charles C., Kansas City
Gummels, Belmont B., St. Louis
Gundle, Sigmund, Kansas City
Gunn, Jack, Versailles
Gunn, Richard W., Kansas City
Gunn, Walter T., St. Louis
Gunter, Joe S., St. Joseph
Gupta, B. S. N., Kansas City
Gurnee, Landon H., Jefferson City
Gustafson, Jon E., Independence
Guthrie, Richard A., Columbia
Guze, Samuel B., St. Louis

H

Haas, Harry D., Kansas City
Habib, Henry N., Kansas City
Haddock, James N., Webster Groves
Haen, Charles J., Springfield
Haffner, Heinz, St. Louis
Haffner, Joel L., Vincennes, Ind. (Member Clay County Medical Society)
Hagan, Daniel J., St. Louis
Hagar, David L., Kansas City
Hagebusch, Omer E., St. Louis
Hagemann, Paul O., Clayton
Hagen, Duane, St. Louis
Hahn, Frederick W., Jr., Kansas City
Haight, John M., Kansas City
Haith, Edward E., Kansas City
Haith, Walter F., Kansas City
Haley, Ted M., N. Kansas City
Hall, C. Robert, Versailles
Hall, David G., Columbia
Hall, David W., Rogersville
Hall, Durward G., Springfield
Hall, Eugene W., Ferguson
Hall, James W., Kansas City
Hall, Lee A., Clayton
Hall, Marvin F., Joplin
Hall, Preston C., St. Louis
Hall, Ralph R., Kansas City
Hall, Robert A., St. Louis
Hall, Robert T., Kansas City
Hall, Stanley G., Hannibal
Hall, Thomas B., Arrow Rock
Hall, William K., St. Charles
Hallaba, M. A. S., Joplin
Hallazgo, Santiago Y., Chesterfield
Halley, Robert H., Florissant
Hallinger, Earl S., Jr., St. Louis
Halloran, Mark J., St. Louis
Halperin, Phillip H., Kansas City
Hamburg, Frederic L., Springfield
Hamill, Robert W., Kansas City
Hamilton, Caldwell K., Creve Coeur
Hamilton, Eugene G., Clayton
Hamilton, Eugene H., Joplin
Hamilton, Thomas R., Duluth, Minn. (Member St. Louis Medical Society)
Hamilton, William P., Aurora
Hamilton, Wm. P., St. Louis
Hamlin, Wyeth, Hannibal
Hammes, Roman E., St. Charles
Hammler, Christiana V., St. James
Hammond, David T., St. Louis
Hampton, Henry E., St. Louis
Hampton, Oscar P., Jr., St. Louis
Hampton, Stanley F., St. Louis
Hanan, Ernest B., Springfield
Handler, Eric, St. Joseph
Handler, Fred P., Jefferson City
Hankin, Norman M., St. Louis
Hanna, Hugh A., Warrensburg
Hanna, Richard E., St. Louis
Hansbrough, Eugene T., Poplar Bluff
Hansel, French K., St. Louis
Hansen, Arthur L., Butler
Hanser, Theodore H., St. Louis
Hanson, Karl H., Jr., Kansas City
Hanss, Armand W., Springfield
Hantman, Stephen L., Chesterfield
Hantz, Oscar, Florissant
Hardacre, Ruth A., Kansas City
Hardin, William B., Jr., St. Louis
Hardwicke, Henry M., Ashland
Hardy, Guerdan, Clayton
Hardy, Henry M., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Hardy, John W., Kansas City
Hardy, Patrick J., Florissant
Hardy, Stanton L., Desloge
Harell, Alex, St. Louis
Harford, Carl G., St. Louis
Harkins, William B., St. Louis
Harkness, Harry, Warrensburg
Harland, Robert E., La Jolla, Calif. (Member Mineral Area County Medical Society)
Harless, Morris S., Kansas City
Harlow, Lloyd M., Kansas City
Harmon, Ben C., Springfield
Harms, Florian L., Salisbury
Harms, James F., Nevada
Harned, Bert W., Olathe, Kan. (Member Jackson County Medical Society)
Harner, Casper G., St. Joseph
Harper, Fleming B., St. Louis
Harrell, Henry J., Summerfield, Fla. (Member Dallas-Hickory-Polk-Dade County Medical Society)
Harrin, William R., Kansas City
Harris, Charles W., St. Louis
Harris, Hugh S., Jr., Columbia
Harris, Robert J., Columbia
Harris, Solon P., St. Louis
Harrison, Lee B., St. Louis
Harrison, Richard L., Crestwood
Harrison, Stratton W., Springfield
Harrison, Winston E., Columbia
Hart, L. Wayne, Kansas City
Hart, Martin M., Salem
Hart, William M., Columbia
Harting, Hugh R., St. Louis
Hartman, Paul T., St. Louis
Hartnett, Leo J., St. Louis
Hartnett, Thomas D., St. Louis
Hartstein, Jack, St. Louis
Hartwig, Frederick H., Kansas City
Hartwig, John A., St. Louis
Hartwig, Raymond W., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Harvey, Harold D., Springfield
Harwell, J. Larry, St. Louis
Harwell, J. Lester, Lubbock, Tex. (Member Butler-Wayne-Ripley County Medical Society)
Hasek, James A., Mountain Grove
Hasek, O. Martin, Mountain Grove
Hasenmueller, James J., St. Louis
Hata, Daikichi, Boonville
Hatfalvi, Bela I., St. Louis
Hauser, Robert J., Jefferson City
Hausheer, Herman J., Independence
Haw, Marvin T., Jr., Columbia
Hawk, Bray O., St. Louis
Hawker, William D., St. Louis

Hawkins, George L., Jr., St. Louis
Hawkins, Lee W., Chesterfield
Hayek, Wesley E., Florissant
Hayes, Lawrence L., Kansas City
Hayes, Paul W., St. Joseph
Haynes, James W., St. Louis
Haynes, Solon E., Kansas City
Haynie, William W., Butler
Hazen, Robert M., Kansas City
H'Doubler, Charles E., Springfield
H'Doubler, Francis T., Jr., Springfield
H'Doubler, Peter B., Springfield
Headrick, John A., St. Louis
Hecker, Joseph E., Poplar Bluff
Hedges, Richard C., Excelsior Springs
Heeb, Max A., Sikeston
Heideman, Milo L., St. Louis
Heifetz, Carl J., St. Louis
Heilbrunn, Ilse, Rolla
Heilman, Edward J., Kansas City
Heiman, Avivi, St. Louis
Heins, James N., St. Louis
Helbing, Edward J., Rio Rancho Estates, N. M.
(Member St. Louis County Medical Society)
Hellerstein, Stanley, Kansas City
Hellweg, Charles E., Mt. Vernon
Hellweg, Raymond W., Florissant
Helm, James O., New Florence
Helman, Richard G., Kansas City
Henderlite, John W., St. Louis
Hendin, Aaron, Olivette
Hendren, Thomas H., N. Kansas City (Member Clay County Medical Society)
Hennelly, John J., St. Louis
Henry, Clarke Latta, Kansas City
Henry, Robert D., Harrisonville
Henschel, Eugene V., St. Louis
Her, Kyu Sook, St. Louis
Herbert, Charles T., Cape Girardeau
Herdoiza, Alfonso W., Kansas City
Herfkens, Kenneth D., Springfield
Herman, Allen I., St. Joseph
Herman, Edwin M., Kansas City
Herman, Morris, St. Louis
Hernandez, Salvadore, St. Louis
Herrman, George V., Kansas City
Hershey, Falls B., St. Louis
Hertel, Ronald C., St. Louis
Hervey, Wm. H., II, Kansas City
Herzog, Godofredo M., Florissant
Hetlage, Louis P., Troy
Heusler, Anton F., St. Louis
Heutel, Lee B., St. Louis
Hibbard, Blaine Z., Kansas City
Hickcox, John P., Columbia
Hickerson, William H., Independence
Hickey, Glenn M., Manchester
Hickey, James L., St. Louis
Hicks, Robert S., St. Louis
Higgins, Philip C., St. Louis
Higgins, Ronald A., Kansas City
Hightower, Harry G., St. Louis
Hilbert, Paul H., St. Louis
Hildreth, H. Rommel, St. Louis
Hill, Jack H., Kansas City
Hill, James E., Fulton
Hill, Ronald T., Dexter
Hill, XaCadene A., St. Louis
Hilliard, Alphonso W., St. Louis
Hillman, Richard E., St. Louis
Hills, Joseph E., Springfield
Hilton, Paul E., Kirksville
Hinds, R. David, Hannibal
Hink, Frederick W., Independence
Hironimus, John, St. Louis
Hirsch, Joe E., Kansas City
Hite, Dennis E., Lebanon
Ho, Grinny H. C., Sikeston
Ho, Kun-Tzeng, Florissant
Hoadley, William D., Kansas City
Hobbs, George H., Warrensburg
Hobbs, John E., St. Louis
Hoctor, Emmett F., Farmington
Hodge, Robert H., Kansas City
Hodgson, Frank H., Kansas City
Hodgson, Sheila, St. Louis
Hoech, George P., Jr., Kansas City
oelscher, Harold F., Warrenton
oeper, Samuel D., Grandview
offman, Jacob S., Kansas City
Hoffmann, Alan L., Kansas City
offmann, Augustin D., St. Louis
offmann, Lee Martha, Shawnee Mission, Kan. (Member Jackson County Medical Society)
offmann, Ronald E., St. Louis
ofling, Charles K., St. Louis
ofstatter, Leopold, St. Louis
ogan, Cornelius E., St. Louis
ogan, Daniel F., Brownsville, Texas
(Member Jackson County Medical Society)

Hogan, John R., St. Louis
Hogan, Patrick A., St. Louis
Hogan, Patrick C., St. Louis
Hogancamp, Glenn E., Ellisville
Hogue, Frank S., Kansas City
Hoja, W. Alexander, Poplar Bluff
Holbrook, Charles K., St. Louis
Holcomb, John K., Cape Girardeau
Holder, Thomas M., Kansas City
Holemon, R. Eugene, St. Louis
Holland, Robert D., Springfield
Holley, Donald B., Camdenton
Hollinger, Lloyd A., Kansas City
Hollingsworth, Ray S., Clinton
Hollis, Richard W., Springfield
Hollo, Vencel W., St. Louis
Hollocher, Richard J., Creve Coeur
Holloway, Robert B., St. Louis
Hollweg, Kenneth C., Kansas City
Holmes, Daniel E., Springfield
Holmes, David R., Springfield
Holscher, Edward C., St. Louis
Holt, Earl P., Jr., St. Louis
Holt, Waldo S., Kansas City
Holt, William E., St. Louis
Holton, Edward B., Independence
Holtz, Alan S., St. Louis
Holtz, Sumner, St. Louis
Holtzman, Samuel, Chicago, Ill.
(Member Jasper County Medical Society)
Hook, Waller G., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Hookerman, Bruce J., St. Louis
Hoover, Bernard L., St. Louis
Hoover, H. Lee, Jr., Springfield
Hopeman, Alan R., Englewood, Colo.
(Member Boone County Medical Society)
Hopkins, Florian G., Gideon
Hopkins, James P., Kansas City
Hopkins, Thomas J., Sedalia
Hopkins, T. Spencer, Sedalia
Horenstein, Simon, St. Louis
Hori, Jose M., Columbia
Horn, Paul C., Cape Girardeau
Horner, John L., St. Louis
Hornstra, Robijn K., Kansas City
Horton, James D., Springfield
Horwitz, Irwin B., St. Louis
Houck, Russell M., Kecoughtan, Va.
(Member Clay County Medical Society)
Houston, Vincent T., St. Louis
Hovadhanakul, Praphat, St. Louis
Howden, Thomas L., St. Joseph
Howe, Albert L., St. Louis
Howe, Louis F., St. Louis
Howell, Billy D., Brookfield
Hoxworth, Gerald M., Columbia
(Member Cape Girardeau County Medical Society)
Hubbard, Sally L., Springfield
Hubbell, Ira G., Columbia
Huber, K. Herbert, Pensacola, Fla. (Member Lafayette-Ray County Medical Society)
Huber, Lasley E., Moberly
Huck, Frank F., Fenton
Huck, Richard F., St. Louis
Huckstep, Robert A., Farmington
Huddleston, Harvey T., Smithville
Hudgens, Richard W., St. Louis
Hudson, G. R., Moberly
Hueser, James N., Columbia
Huet, Raul, Kansas City
Huewe, Douglas A., Springfield
Huggins, Albert M., St. Louis
Hughes, Derek Dominic, Nevada
Hughes, Judson M., St. Joseph
Hughes, Michael F., Kansas City
Hughes, Robert G., St. Louis
Hughes, Shelby B., Clinton
Hulbert, Bernard, St. Louis
Hulstra, Johannes F. W., Springfield
Hummel, Anton J., St. Louis
Hummel, William C., St. Louis
Humphrey, James, Mound City
Humphreys, Edward T., Boonville
Hungate, Carroll P., Kansas City
Hunkeler, John D., Kansas City
Hunleth, Frank E., St. Louis
Hunt, John L., Poplar Bluff
Hunt, John W., Jr., Farmington
Hunt, Robert S., Cape Girardeau
Hunt, Thomas R., Kansas City
Hunter, Martin P., Kansas City
Huntington, Ione, Mt. Vernon
Hunzicker, Warren J., Kansas City
Huq, Md. Nasrul, Mexico
Hurst, Wilfred W., Joplin
Hurwitt, Frank, Kansas City
Huse, William J., II., Kansas City
Hutchinson, James H., Jr., St. Louis
Hutchinson, William B., St. Louis
Hutto, A. Herman, St. Louis
Hwang, Yung H., Carthage

Hyde, Lawrence L., Kansas City
Hyman, Anna, St. Louis

I

Ibaviosa, Alfred C., Crystal City
Ide, Carl H., Columbia
Ide, Lucien W., St. Joseph
Idewu, Olawale O., St. Louis
Imes, Elvin D., Maryville
Ingham, Walton C., Kansas City
Inkley, John J., St. Louis
Inman, Max M., St. Louis
Ippensen, John H., Springfield
Irick, Carl C., Naples, Fla.
(Member St. Louis County Medical Society)
Irvin, William M., St. Louis
Irvine, John W., Kansas City
Irwig, Fred, Kansas City
Isaac, Anita M., Springfield
Isbell, Charles H., Carthage
Ise, Frank H., N. Kansas City
Ishida, Yasuo, St. Louis
Islam, Mohammed N., St. Louis
Isom, Waldo B., Knox City
Ittner, George W., Jr., St. Louis
Ivy, Henry B., Springfield
Izmirlian, Grant, St. Louis

J

Jablonski, Raymond C., St. Charles
Jackson, Edward K., Clarksville
Jackson, Haywood R., Kansas City
Jackson, Robert L., Columbia
Jackson, Vernon B., Fulton
Jackson, William R., Maryville
Jacob, Karl A., Jr., St. Louis
Jacob, Walter P., Kansas City
Jacobs, Charles C., St. Louis
Jacobs, Frederick A., St. Louis
Jacobs, Morton, Kansas City
Jacobs, Walter H., Kansas City
Jaeckle, Richard G., St. Louis
Jaeger, Joseph N., Jackson
Jaffe, Bernard M., St. Louis
Jahanian, Iraj, Leavenworth, Kan. (Member St. Louis Medical Society)
James, Elizabeth J. P., Columbia
James, Otis E., Jr., Kansas City
James, Ronald C., Columbia
Jameson, James E., Springfield
Janes, Donald R., Kansas City
Janney, James G., Jr., St. Louis
Jansen, Robert, Kansas City
Jaramillo, Jaime, St. Louis
Jaudon, Joseph C., St. Louis
Jayanandaiah, H. P., Hannibal
Jayaram, M. R., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Jean, J. Ted, St. Louis
Jeans, Virgil, Joplin
Jenab, Morteza, Kansas City
Jennett, James H., Kansas City
Jensen, Joshua E., Florissant
Jick, Sidney, St. Louis
Jimenez, Jose, St. Joseph
Jobe, Charles L., Jr., Springfield
Joffe, William S., St. Louis
Johnsgard, Larry S., Columbia
Johnson, C. Laurence, Kansas City
Johnson, Charles Julius, St. Louis
Johnson, Charles S., Warrensburg
Johnson, Dallas A., Kansas City
Johnson, Earl W., Cape Girardeau
Johnson, Edgar W., Jr., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Johnson, Ernest D., Cape Girardeau
Johnson, Fritz M., Springfield
Johnson, Gareth R. P., Kansas City
Johnson, George A., Springfield
Johnson, James S., Kansas City
Johnson, Joseph C., Jr., Springfield
Johnson, Joseph E., Kansas City
Johnson, Maurice N., St. Louis
Johnson, Mitchell D., Ferguson
Johnson, Richard E., Columbia
Johnson, Richard L., Kansas City
Johnson, Roy, Ferguson
Johnson, Thomas M., Kansas City
Johnson, Warford B., Springfield
Johnson, William F., Springfield
Johnston, Glen P., St. Louis
Johnston, Joseph L., Springfield
Johnstone, John, Jr., Kirkwood
Johnstone, Paul N., Kansas City
Jolly, Benjamin N., Mexico
Jolly, William H., Mexico
Jonas, Harry S., Jr., Independence
Jones, Andrew B., Soddy, Tenn.
(Member St. Louis Medical Society)
Jones, Augustin, St. Louis

Jones, David N., Cape Girardeau
Jones, Dorothy J., St. Louis
Jones, Edna M., Clinton
Jones, Edward S., Harrisonville
Jones, Gale O., Kansas City
Jones, Grey, Eminence
Jones, Harold L., Springfield
Jones, James B., St. Louis
Jones, James D. II, St. Louis
Jones, James H., St. Louis
Jones, John B., Columbia
Jones, Keith D., Warrensburg
Jones, Marion E., Kansas City
Jones, Otey S., St. Louis
Jones, Richard A., St. Louis
Jones, Samuel T., III, Kansas City
Jones, Theodore R., Kansas City
Jones, Victor, Brentwood
Jones, Vincent L., St. Louis
Jordan, Walter R., Grapeland, Tex.
  (Member St. Louis Medical Society)
Joseph, Donald J., Columbia
Joseph, Harold J., St. Louis
Joslyn, Harold L., St. Louis
Jost, Charles A., Florissant
Jotte, Richard F., St. Ann
Judd, Donald, St. Louis
Judge, Walter T., Crystal City
Judy, Joseph D., Florissant
Juergens, William G., St. Louis
Jung, J. Marshall, Illmo
Justus, John B., Kansas City

K

Kabir, Mohammed A., St. Louis
Kahler, Monte R., Bolivar
Kahn, Lawrence, St. Louis
Kahu, Marvin, Kansas City
Kairuz, Bartholome C., St. Louis
Kaiser, George C., St. Louis
Kallenbach, Glen P., Mexico
Kamada, Tsutomu, O'Fallon
Kamakas, Nicholas, Florissant
Kamenetzky, Stephen A., Phoenix, Arizona
  (Member St. Louis Medical Society)
Kaminski, Donald L., St. Louis
Kaminsky, Watson W., St. Louis
Kamuran, Ozgoncu, St. Louis
Kanagawa, Harold K., Jefferson City
Kanarek, Joseph. Kansas City
Kandt, Ray E., Jr., Kansas City
Kane, Clyde E., St. Louis
Kang, Chang H., De Soto
Kang, Juan, St. Louis
Kantor, Julius M., Kansas City
Kantor, Samuel, Kansas City
Kao, Ming-Shian, St. Louis
Kaplan, Alex H., St. Louis
Kappesser, Netajean B., St. Louis
Kappesser, Roland C., St. Louis
Karandjeff, Apostle D., St. Louis
Karatela, Mohammed, St. Louis
Kardesch, Milton, St. Louis
Karl, Michael M., St. Louis
Karraker, Alvan G., Farmington
Karsh, Robert S., St. Louis
Kartus, Irving, Kansas City
Kaskie, Clifford R., St. Ann
Kasten, Melvin C., Cape Girardeau
Katf, Nicola, Kansas City
Kauffman, Ruth, Versailles
Kaufman, Andrew B., Kansas City
Kaufman, Robert L., St. Louis
Kaufmann, Herbert H., Kansas City
Kaul, Philip G., Kansas City
Kay, Billy F., Kansas City
Kayanan, Jose C., Kansas City
Kayes, Jack, St. Louis
Kays, Kenneth M., Columbia
Keeble, Charles B., St. Louis
Keefe, David M., St. Charles
Keeler, James E., Kansas City
Keenoy, John J., St. Louis
Keffler, Karl L., St. Louis
Keim, John H., Cape Girardeau
Keitges, Pierre W., Kansas City, Kan.
  (Member Jackson County Medical Society)
Keller, Louis, St. Louis
Keller, Maurice J., St. Louis
Keller, Robert M., Wentzville
Kellett, John G., Webster Groves
Kelley, Gilbert B., Savannah
Kelley, Robert W., St. Louis
Kelling, Douglas G., Kansas City
Kelling, Jordan, Waverly
Kelly, John J., St. Louis
Kelly, Joseph G., Kansas City
Kelly, Marshall W., Jefferson City
Kelly, R. Emmet, St. Louis
Kelsey, Kenneth L., Aurora
Keltner, R. M., Jr., St. Louis
Keltner, R. O., Shawnee Mission, Kans.
  (Member Jackson County Medical Society)
Kendall, Charles A., Kansas City
Kendall, Forrest H., Prairie Village, Kan.
  (Member Jackson County Medical Society)
Kendig, John H., St. Louis
Kendis, Joseph B., St. Louis
Kennard, George K., Kansas City
Kenney, John D., St. Louis
Kenney, Roy E., Neosho
Kent, Bela K., Kansas City
Kenzler, Jack I., St. Louis
Keown, Kenneth K., Columbia
Kernodle, Jefferson D., Kansas City
Kerr, David N., St. Louis
Kerr, Frank T., Monett
Kerr, S. Earl, Columbia
Kessler, Sheldon, Florissant
Ketterman, Grace H., Kansas City
Ketterman, Herbert L., Kansas City
Kettner, Edward G., Kansas City
Key, James S., Springfield
Key, Martin L., Ste. Genevieve
Keyes, Edward L., Clayton
Khan, Abdul G., St. Louis
Khan, Altaf Ali, St. Louis
Khan, Chung H., St. Louis
Khan, M. Osman, St. Louis
Khodadoust, Kavous, St. Louis
Kieber, Robert W., St. Joseph
Kieffer, Victor B., Jr., Kirkwood
Kienberger, Paul A., Independence
Kielar, Richard A., Fort Leonard Wood
Kiene. Richard H., Kansas City
Kienzle, Edward C., St. Louis
Kilker, Clarence H., Normandy
Kilker, Donald E., Normandy
Killen, Duncan A., Kansas City
Kilo, Charles, St. Louis
Kim, Chung Ki, Hazelwood
Kim, Tchang Man, Columbia
Kimball, Ireland W., Kansas City
Kimball, Merritt H., Kansas City
Kimberlin, Herbert C., Trenton
Kimble, Harvey S., Kansas City
Kimelman, Nathan, St. Louis
Kimura, Richard Y., St. Louis
Kinder, James A., Cape Girardeau
Kinder, Jerry L., Cape Girardeau
Kindred, Lynn H., Kansas City
King, Elbert R., Boise, Idaho
  (Member West Central Missouri Medical Society
King, Eustace E., III, St. Louis
King, Francis C., Kirkwood
King, J. Tenbrook, Kansas City
King, James P., St. Louis
King, John V., Jr., A.P.O. N. Y.
  (Member St. Louis Medical Society)
King, John V., Webster Groves
King, Morris K., St. Louis
King, Phillip E., Liberty
King, Richard H., Clinton
King, Robert J., Columbia
King, Walter R., Kansas City
Kingsbury, Helen, Shawnee Mission, Kan.
  (Member Jackson County Medical Society)
Kingsland, Robert C., St. Louis
Kinney, Sam E., St. Louis
Kinsella, Edward D., Richmond Heights
Kinsella, Peter W., St. Louis
Kinsella, Ralph A., Jr., St. Louis
Kinzie, Jeannie J., St. Louis
Kinzie, Joseph L., Jr., St. Louis
Kipnis, David M., St. Louis
Kirkland, Jerry A., Kansas City
Kirkman, Robert E., Joplin
Kirstein, Melvin B., St. Louis
Kissane, John M., St. Louis
Kister, George E., St. Charles
Kistner, William F., St. Louis
Kitchen, William M., Kansas City
Klaus, Hanna, St. Louis
Klebba, Larry B., Jefferson City
Klein, Arnold G., St. Louis
Klein, Bert H., St. Louis
Klein, Edward H., Prairie Village, Kan.
  (Member Jackson County Medical Society)
Klein, Saul J., St. Louis
Kleinschmidt, Clinton, St. Louis
Klenk, Charles L., St. Louis
Kline, Carlyn M., St. Joseph
Kline, Edmund W., St. Joseph
Klinge, Frederick W., St. Louis
Klingner, George M., Springfield
Klingner, George M., Jr., Springfield
Klinkerfuss, George H., St. Louis
Klippel, Allen P., St. Louis
Klippel, Bernhardt W., St. Louis
Kloecker, Richard J., St. Ann
Kloecker, Robert P., St. Louis
Knabb, Arthur D., Springfield
Knabb, Kenneth E., Springfield
Kneal, E. Ellsworth, St. Louis
Kneibert, Fred L., Poplar Bluff
Knepper, Paul A., St. Joseph
Knight, Franklin P., St. Louis
Knight, John S., Shawnee Mission, Kan.
  (Member Jackson County Medical Society)
Knight, Lyle B., Lee's Summit
Knight, William A., Jr., St. Louis
Knipschild, Bedford F., Marshall
Knoch, H. Kermit, Kansas City
Knock, Henry L., Kirkwood
Knowles, R. R., Bethesda, Md. (Member St. Louis Medical Society)
Knowlton, Norman P., Jr., St. Louis
Knutson, Carl O., Columbia
Koch, Robert E., Clayton
Kodner, Ira J., St. Louis
Koehler, George A., St. Louis
Koehler, John W., Joplin
Koenig, Marvin I., Florissant
Koerner, Kenneth A., St. Louis
Koessel, Arthur W., St. Louis
Kohler, Louis H., St. Louis
Kolker, Allan E., St. Louis
Kolodny, Robert C., St. Louis
Kolze, Vernon W., Springfield
Komanetsky, William M., St. Louis
Konzelmann, John A., St. Louis
Koon, Ben H., Bolivar
Koontz, Paul G., Kansas City
Kopman, Ercument A., St. Louis
Kopp, Jules H., St. Louis
Kopp, Leonard J., St. Louis
Koppenbrink, Walter E., Jr., Higginsville
Kopta, Joseph A., St. Louis
Korenblat, Phillip E., St. Louis
Korn, Robert L., St. Louis
Korth, William M., Sarasota, Fla.
  (Member Jackson County Medical Society)
Kostianovsky, Jorge E., St. Louis
Kotner, Lawrence M., University City
Koutsoumpas, William V., St. Louis
Kovac. S. Robert, St. Louis
Kowert, Edward H., St. Louis
Kozal, Francis L., Crystal City
Kozlowski, Albert E., St. Louis
Kraft, Jacob, Kansas City
Kramolowsky, Helmuth H., St. Louis
Kraner, Justin F., University City
Kranson, Seymour J., Independence
Kratz, Paul E., Cape Girardeau
Krause, G. Lynn, Jr., St. Louis
Krebs, Joseph M., St. Louis
Kroe, Donald J., Belleville, Ill.
  (Member St. Louis Medical Society)
Krojanker, Rolf, St. Louis
Kromer, Charles, St. Louis
Kronemer, Norton S., St. Louis
Kruse, Carl R., Palmyra
Kubin, Milford T., Columbia
Kuczer, Arnoldo, St. Louis
Kuebrich, Thomas C., Ferguson
Kuenzi, Donald E., Kansas City
Kuhlman, Ralph, St. Louis
Kuhlman, Robert E., St. Louis
Kuhn, John R., Jr., Joplin
Kuhn, Nobuko O., St. Louis
Kuhn, William F., II, Kansas City
Kulak, Gary, St. Louis
Kulowski. Jacob, St. Joseph
Kunawongsa, Nit, St. Louis
Kurtz, Karl J., Kansas City
Kuruvilla, George, Kansas City
Kurz, Rudolph F., Alton, Ill.
  (Member St. Louis Medical Society)
Kusama, Haruo, St. Louis
Kutryb, Walter J., Florissant
Kuttner, Marianne. St. Louis
Kwan, Vincente W., Potosi
  (Member St. Louis County Medical Society)
Kyger, John E., Independence

L

Lachance, Leopold, Centralia
Lacson, Leticia D., St. Louis
Lacy, Paul E., St. Louis
Ladd, Charles B., St. Louis
Ladenson, Roland P., Columbia
LaDriere, Raymond J., Creve Coeur
Ladyman, George H., Poplar Bluff
LaFerriere, Keith A., St. Louis
LaHue, William C., Lexington
Laird, John M., Jr., Florissant
Lally, James J., Kansas City
Lam, Ernesto S., St. Louis
Lam, Robert L., St. Louis
Lamar, Robert F., Kansas City
Lamb, Wanda, St. Louis
Lambert, Marian, Kansas City
Lambie, Rodger W., Kansas City
Lampton, Lawrence M., Kansas City

Lamy, John E., Sedalia
Landau, William M., St. Louis
Landers, Burnell, Kansas City
Landhuis, L. R., Columbia
Landis, George K., Kansas City
Landry, J. Hubert, St. Louis
Lane, Clinton W., St. Louis
Lane, Daniel K., St. Louis
Lang, John J., St. Louis
Lange, Adolph C., St. Louis
Langeluttig, Harry V., El Dorado Springs
Langenbach, Alfred M., Ladue
Langhus, Melvin O., N. Kansas City
Langlois, Paul J., St. Louis
Langston, Walter R., Springfield
Lanier, Earl W., St. Louis
Lankford, Harold D., Mexico
Lanning, R. James, N. Kansas City
(Member Clay County Medical Society)
Lanning, Richard C., Ste. Genevieve
Lanning, Robert J., Hannibal
Lansangan, Isais, Arnold
Lansche, Elmer A., St. Louis
Lansche, W. Edward, St. Louis
Lapi, Angelo, Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Lapp, Harry C., Kansas City
Larocca, Felix E. F., St. Louis
Larsen, Kenneth V., St. Louis
Larsen, Virginia, St. Louis
Larson, Paul U., St. Louis
Lassar, Gilbert N., St. Louis
Latham, Kenyon S., California
Latham, Raymond W., Kansas City
Latimer, Walter N. A., Hannibal
Lattinville, Henry E., Florissant
Lau, Luis, St. Louis
Lauber, Joseph J., St. Louis
Lauer, Daniel J., Kansas City
Lauer, John D., St. Louis
Laux, France A., St. Louis
Lawrence, George H., Green Bay, Wis.
(Member St. Louis Medical Society)
Lawrence, John R., Marshall
Lawton, John T., St. Louis
Lawton, Lawrence M., St. Louis
Layle, John K., Jr., Kansas City
Layton. Ira C., Kansas City
Leach, Wilfred, St. Louis
Leagus, Charles J., Jr., Springfield
LeBlanc, Leo J., St. Louis
L'Ecuyer, Jerome L., St. Louis
Lederer, Charles M., Warrensburg
Lederman, Joseph, St. Louis
Lee, Carleton H., St. Joseph
Lee, Fransiska, St. Louis
Lee, Gerald B., Kansas City
Lee, Henry A., Kansas City
Lee, King Ying, Kansas City
Lee, Tae Hung, Kansas City
Lee, Yeu-Tsu, Sepulveda, Calif. (Member Boone County Medical Society)
Leech, Charles A., Columbia
Leech, Maurice P., Fayette
Leeper, Sidlee W., Columbia
Le Fevre, Philip J., Springfield
Legan, John K., Kennett
Lehman, Philip C., St. Joseph
Lehman, Ralph A. W., Denver, Colo.
(Member St. Louis Medical Society)
Lehner, Richard L., Kansas City
Lehr, James L., Columbia
Leidinger, Karl J., Republic
Leifer, William W., Kansas City
Leightner, William, St. Louis
Leitch, Cecil G., Blue Springs
Lembeck, Joseph A., St. Louis
Lemmon, George B., Springfield
Lenobel, Milton I., Clayton
Lentz, Clark H., Kansas City
Lentz, Harold C., Neosho
Leo, William A., Kansas City
Leonhardt, Erwin M., St. Louis
Leonidas, John C., Kansas City
Leroux, Gene H., Doniphan
Lerwick, Everett R., St. Louis
Leslie, Charles H., Kirkwood
Leslie, James T., Jr., Jefferson City
Lestmann, Henry E., Doniphan
Levey, Harry B., Kansas City
Levey, Simon A., St. Louis
evin, Marvin E., St. Louis
evitt, Joseph, St. Louis
evy, Irwin, St. Louis
Levy, Jerome F., St. Louis
Levy, Morton A., University City
ewellen, Charles H., Louisiana
ewin, Wilbur H., St. Louis
ewis, Charles R., Florissant
ewis, James E., Jr., St. Louis
ewis, Noel R., Springfield
ewis, Ray B., Rocheport
ewis, Revis C., Kansas City

Leydig, Stanley M., St. Louis
Liang, Howard S., St. Louis
Liang, Jing C., Independence
Liao, Kun T., St. Louis
Lichtor, Alexander, Kansas City
Lichtor, Joseph M., Kansas City
Lichty, Charles A., Shelbina
Lieb, Francis X., St. Louis
Lieb, Otto, St. Louis
Lieberman, B. Albert, Jr., Kansas City
Lieberman, David M., St. Louis
Liese, Grover B., St. Louis
Lila, Aram, Independence
Lilly, Douglas R., St. Louis
Lincoln, James, Troy
Lindberg, Donald, Columbia
Lindeman, Carl H., St. Louis
Lindeman, John, St. Louis
Lindgren, Carleton J., Kansas City
Lindquist, Carl N., Reeds Spring
Ling, Walter, Sepulveda, Calif.
(Member St. Louis Medical Society)
Link, Alexander J., St. Louis
Link, Vance E., Independence
Lins, Robert D., Des Peres
Linsenmeyer, Charles M., St. Charles
Linville, Howard E., Kansas City
Lipschitz, Ervin, St. Louis
Lipsitz, Ellis S., St. Louis
Lischer, Carl E., St. Louis
Liss, Jay Lawrence, St. Louis
Lissner, Arthur B., O'Fallon
Little, Monroe H., St. Louis
Littlejohn, Robert T., N. Kansas City
Littmann, Lewis E., St. Louis
Litton, Lyle D., Springfield
Litwiller, R. W., Columbia
Litzow, Louis T., St. Louis
Liu, Paul I., Kansas City (Member St. Louis Medical Society)
Livingston, Don, Ballwin
Lloyd, Ivan E., Kansas City
Lockhart, Charles E., Springfield
Lodwick, Gwilym S., Columbia
Loeb, Richard H., Springfield
Loeb, Virgil, Jr., St. Louis
Loeffel, Ellen S., St. Louis
Logie, MacDonald B., St. Louis
Logue, John T., Columbia
Lohmar, Roland E., Columbia
Lohr, Robert W., St. Louis
Lohrentz, Lois H., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Loitman, Bernard, St. Louis
Londe, Alan M., St. Louis
Londe, Sol, St. Louis
London, Stanley L., St. Louis
Lonergan, Warren M., St. Louis
Long, Curtis W., Butler
Long, David S., Harrisonville
Long, Frank B., St. Louis
Long, R. Stacy, Kansas City
Longenecker, Joe L., Joplin
Lonsway, Maurice J., St. Louis
Lonsway, Maurice J., Jr., St. Louis
LoPiccolo, Vincent J., St. Louis
LoPiccolo, Vincent J., Jr., St. Louis
Lord, Richard E., St. Louis
Lorenc, Ernest, Springfield
Lorenzo, Edilberto B., Kansas City
Lotito, Carlos A., Kansas City
Lottes, James O., St. Louis
Loughead, John R., Poplar Bluff
Loutzenhiser, James K., Kansas City
Lovett, Robert L., Springfield
Lovinggood, Thomas A., Cape Girardeau
Lowe, Alvin L., Sedalia
Lowe, Horace A., Jr., Springfield
Lowell, Paul, Kansas City
Lowenstein, Paul S., St. Louis
Lowther, Gerald S., Chesterfield
Loyd, Earl L., Holts Summit
(Member Cole County Medical Society)
Lucas, Fred V., Columbia
Lucido, Joseph L., St. Louis
Lucke, Eugene M., Hannibal
Luckenbill, Paul T., Plattsburg
Luedde, Philip S., St. Louis
Luehrs, Robert O., St. Louis
Lugo, Samuel, St. Louis
Luh, Andrew, St. Louis
Lukens, John N., Jr., Boston, Mass.
(Member Boone County Medical Society)
Lum, Jon Tek, St. Louis
Lund, Herluf G., St. Louis
Lund, Robert H., Clayton
Lundgren, Fred H., Jr., Kansas City
Lurie, Harold H., Springfield
Lusk, Charles A., Jr., Butler
Luther, George A., St. Louis
Lutkewitte, Joseph F., Ste. Genevieve
Lutz, Martin H., St. Louis
Lyddon, Harold R., Jr., Kansas City
Lyle, Robert R., Versailles

Lyman, Edward H., St. Louis
Lynxwiler, Chester P., St. Louis
Lyskowski, Maria, St. Louis
Lyss, Carl, St. Louis
Lyss, Stanley B., University City
Lyttle, Garnet C., St. Louis
Lytton, George J., Kansas City

Mc

McAdam, Charles R., St. Louis
McAfee, C. Alan, St. Louis
McAfee, R. Gordon, Kansas City
McAlhany, Howard J., Springfield
McAlister, William H., St. Louis
McArtor, Thomas R., Browning
McBurney, Charles A., Slater
McCaffree, Mary K., Jefferson City
McCall, Edwin L., Kimberling City
McCalla, John P., Kansas City
McCallister, Ben D., Kansas City
McCann, Louis P., Nevada
McCanse, Andrew, Kansas City
McCarroll, H. Relton, Jr., St. Louis
McCarthy, John M., St. Louis
McCarthy, Thomas D., Ferguson
McCaughan, John M., St. Louis
McClanahan, Robert C., Kansas City
McCloskey, R. Bruce, St. Louis
McClure, David N., St. Louis
McClure, James N., Jr., St. Louis
McConahay, David R., Kansas City
McConchie, James E., Independence
McConnell, Robert G., St. Louis
McCool, James F., Jr., St. Louis
McCool, Stanley G., St. Louis
McCord, E. Scott, Columbia
McCorkle, E. Lee, Marshall
McCormick, James E., Kansas City
McCown, Allan H., Kirkwood
McCoy, Donald L., Marshall
McCoy, Frederick J., Kansas City
McCoy, Warren R., Caruthersville
McCracken, Samuel R., Excelsior Springs
McCraw, Doyle C., Bolivar
McCray, Glen M., Kansas City
McCubbin, Clarence R., Leawood, Kan.
(Member Jackson County Medical Society)
McCullough, Campbell C., Kansas City
McDaniel, John R., St. Joseph
McDermott, Alfred E., Perryville
McDonald, Eugene F., Jackson
McDonald, Wallace, St. Joseph
McDonald, Wilbur P., St. Joseph
McDonnell, John F., Kansas City
McDonough, John, St. Louis
McDowell, Richard L., St. Louis
McElroy, Glenn L., Columbia
McFadden, Gene A., Waverly
McFadden, James F., Sr., St. Louis
McFarland, H. Richard, Kansas City
McFarland, Morris D., Kansas City
McGannon, Paul T., Kansas City
McGinnis, Byron J., St. Louis
McGinnis, William F., St. Louis
McGinty, Charles P., Cape Girardeau
McGonigle, James P., Joplin
McGuire, Thomas H., Kansas City
McHaney, John W., Jefferson City
McIntosh, Donald E., Kansas City
McIntyre, John D., Kansas City
McKaskle, Clarence W., Caruthersville
McKee, Howard B., Joplin
McKee, Oliver A., Kirkwood
McKee, Wallace P., Kansas City
McKeel, Thomas B., Kansas City
McKinney, Joseph K., St. Louis
McKinsey, John J., Springfield
McLain, Bobby M., Poplar Bluff
McLane, Jerry F., Poplar Bluff
McLaughlin, Kathleen, St. Louis
McLaughlin, Richard D., Springfield
McLean, Harry A., St. Louis
McLean, Royal C., St. Louis
McLeod, John, Kansas City
McMillan, Thomas E., Kansas City
McMurray, Herbert C., Manchester
McNabney, W. Kendall, Kansas City
McNalley, Frank P., Clayton
McNalley, Michael, St. Louis
McNamara, John J., Richmond Heights
McNeel, Lee A., Jr., Greenfield
McNutt, Theodore L., Kansas City
McPhee, William R., Kansas City
McPheeters, James W., Poplar Bluff
McPike, Lloyd H., Joplin
McQueen, Samuel, St. Louis
McSwiney, John G., St. Louis
McVay, James R., Kansas City
McWherter, Lottie B., Shawnee Mission, Kan.
(Member Jackson County Medical Society)

M

Maben, Sam Edward, Kansas City
Macauley, Bernard J., Poplar Bluff
MacDonald, Robert R., Jr., Chesterfield
Macdonald, William C., St. Louis
Macdonnell, Thomas M., Marshfield
MacGee, Edwin E., Kansas City
Machek, Otakar, St. Louis
MacInnis, Florence E., Kansas City
MacLaughlin, James C., Joplin
MacNaughton, Ralph E., Kansas City
MacNaughton, Robert A., Leawood, Kan. (Member Jackson County Medical Society)
Macnish, James M., St. Louis
Maddox, Albert R., Sedalia
Maddox, John D., Joplin
Maddux, William P., Springfield
Madrid, Dominador, St. Louis
Magaletta, George E., Cape Girardeau
Magee, Robert L., El Dorado Springs
Magee, William E., St. Louis
Magill, Joseph S., Milan
Maginn, R. Reilly, St. Louis
Maginn, Richard L., St. Joseph
Magness, Guy N., University City
Magness, William C., Branson
Magruder, L. M., Nevada
Mahboubi, Aziz Olla, Sikeston
Mabe, George A., St. Louis
Maher, Robert W., Springfield
Maher, Thomas F., St. Louis
Maizus, Saul H., St. Louis
Mallouk, Alexander G., Kansas City
Maloney, Robert M., St. Louis
Maminta, Napoleon S., Chesterfield
Manalo, Gil B., Jr., Festus
Manansala, Antonio Q., St. Louis
Mandler, George, Chillicothe
Manes, Jose, St. Louis
Manganaro, Frank J., St. Louis
Mangels, Kenneth A., Independence
Mangelsdorf, Thomas K., St. Louis
Manion, Peter J., St. Louis
Manley, Charles B., Jr., St. Louis
Mann, James K., Hannibal
Mansur, Edward E., Stuart, Fla. (Member Cole County Medical Society)
Mantell, Jack M., Springfield
Manuel, Louis C., Kansas City
Maple, Francis M., Springfield
Maranan, D. L., Kirkwood
Maravilla, Levy M., St. Louis
Marban, Manuel I., St. Louis
Marco, Philip J., Columbia
Marcus, Morris D., St. Louis
Mardini, Edward E., Bonne Terre
Margolis, Richard M., St. Louis
Marienfeld, Carl J., Columbia
Markel, Arthur D., Poplar Bluff
Markel, Larry G., Kansas City
Marks, Mark M., Kansas City
Marmor, William A., St. Louis
Mars, Hartley F., Forsyth
Marsh, Alice, Pleasant Hill
Marshall, Cameron F., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Marshall, Hal E., Kansas City
Marshall, William G., Glasgow
Marston, F. James, Jr., St. Joseph
Martel, Dominique, St. Louis
Martin, Andrew D., Sikeston
Martin, Clarence A., Joplin
Martin, Clyde V., Kansas City
Martin, Daniel J., St. Louis
Martin, Forrest L., Nevada
Martin, Frederick W., Jr., St. Louis
Martin, J. Barlow, St. Louis
Martin, James David, Yellville, Ark. (Member Greene County Medical Society)
Martin, James M., St. Louis
Martin, John N., St. Joseph
Martin, W. Joe, Louisiana
Martz, Bill L., Kansas City
Martz, John C., St. Louis
Mason, Wayne E., Kansas City
Massie, Edward, St. Louis
Masters, Edwin J., Advance
Masters, William H., St. Louis
Masterson, Byron J., Kansas City
Masucci, Joseph M., Kansas City
Matteson, Frank B., Grant City
Matthews, John G., St. Louis
Matthews, John I., Jefferson City
Mattis, Robert D., Clayton
Maughs, Sydney B., St. Louis
Max, Paul F., St. Louis
Maxey, Hugh W., Quincy, Ill. (Member Cole County Medical Society)
Maxson, T. Reed, Warrensburg
Maxwell, Richard W., St. Louis
May, Albert L., Jr., Poplar Bluff
May, Mark, St. Louis
Mayer, John H., Jr., Kansas City
Mayer, John H., III, Kansas City
Mayer, Robert A., St. Louis
Mayer, William D., Columbia
Mayfield, James L., Crystal City
Mays, Frank G., Washington
Meador, James R., St. Louis
Meadows, C. Douglas, St. Louis
Medina-Lorenzo, Remedios, Kansas City
Medler, Francis J., St. Louis
Medler, John F., St. Louis
Medler, P. Louis, Florissant
Medlicott, William J., Kansas City
Medrano, Crescenciano A., St. Louis
Medrano, Lina Ebro, St. Louis
Meegan, Robert J., Kansas City
Mehan, Donald J., St. Louis
Mehra, Ravinder B., St. Louis
Mehra, Usha, St. Louis
Mehta, Satish K., Kansas City
Meier, Francis X., Jefferson City
Meinberg, William H., St. Louis
Meiners, Paul N., St. Louis
Meiners, Theodore M., St. Louis
Meinershagen, Charles W., Jefferson City
Mejia, Hugo, St. Louis
Melgaard, S. Ross, Kansas City
Melick, William F., St. Louis
Mell, Roger L., St. Louis
Menchetti, Don E., Springfield
Mencias, Cristeta B., St. Louis
Mendelsohn, Robert S., St. Louis
Mendelson, David F., St. Louis
Mendez, Manuel M., St. Louis
Menendez, Manuel F., Ballwin
Menendez, Silvana, Ballwin
Mendonsa, Lawrence E., St. Louis
Meneses, Orlando G., St. Louis
Menne, Marvin G., Ironton
Mentgen, Carl N., Springfield
Merenda, Sam J., St. Louis
Merideth, Mary Jane, Cassville
Meriwether, Don R., Mission, Kan. (Member Jackson County Medical Society)
Merrims, Theodore, St. Louis
Merritt, Burch A., St. Louis
Merveille, Octave C., Kansas City
Merz, Jean J., Creve Coeur
Mestres, Hugh M., St. Louis
Metz, Charles O., St. Louis
Metzgar, Marshall T., Columbia
Metzl, Kurt, Kansas City
Meyer, Herman M., University City
Meyer, James E., Manchester
Meyer, Jay, Clayton
Meyer, John S., St. Louis
Meyer, Melvin E., St. Louis
Meyer, Paul W., Kansas City
Meyers, Elsie F., St. Louis
Meyers, Harold L., Kansas City
Meyers, John B., Clayton
Meyers, Robert W., St. Louis
Meyers, Rosellen E., Cedar Vale, Kan. (Member Ozarks Medical Society)
Mezera, Raymond A., St. Louis
Michael, Harvey R., Springfield
Michael, Kenneth D., St. Louis
Michael, Vernon E., St. Louis
Michaelree, John F., St. Louis
Miciano, Ruel T., Kansas City
Middleton, Jerry N., St. Louis
Middleton, John W., Louisiana
Mier, Thomas M., St. Louis
Milder, Benjamin, St. Louis
Miles, George O., Kansas City
Miles, Glenn E., Louisiana
Miles, Paul W., St. Louis
Milgram, Byron A., Kansas City
Mill, William B., Jr., St. Louis
Millangue, Consolacion P., Rock Hill
Millangue, Rafael M., Rock Hill
Miller, Charles, Jr., Kirkwood
Miller, Clinton L., Lee's Summit
Miller, Clyde S., Waynesville
Miller, D. Herbert, Tulsa, Okla. (Member Chariton-Macon-Monroe-Randolph County Medical Society)
Miller, David V., Poplar Bluff
Miller, Edward J., St. Louis
Miller, Geoffrey W., St. Louis
Miller, Gerald L., Kansas City
Miller, James E., St. Louis
Miller, James R., St. Louis
Miller, Jule P., Jr., St. Louis
Miller, Leroy J., Columbia
Miller, Max I., Kansas City
Miller, Norman C., St. Louis
Miller, Richard B., St. Charles
Miller, Robert N., St. Louis
Miller, Wilson H., Kansas City
Millikan, Larry E., Columbia
Milne, J. L., Springfield
Milstead, Kenneth L., Jr., St. Louis
Milster, Clyde R., St. Louis
Miltenberger, Paul C., Kennett
Minnigerode, Turner L., Kansas City
Minnihan, Robert W., Chesterfield
Minton, Robert S., Forest City
Mirbaha, Mitchell M., St. Louis
Mishkin, Marvin R., St. Louis
Mishra, Dwarka Nath, Humansville
Miskovsky, Emil F., St. Louis
Missey, Wilburn C., Jr., St. Louis
Mitchell, Andrew D., Kansas City
Mitchell, Eugene, St. Louis
Mitchell, Franklin L., Columbia
Mitchell, John D., Kansas City
Mitchell, Lynn D., Columbia
Mitchell, Robert H., Kansas City
Mitchell, Roy E., Salem
Mitchell, Thomas J., St. Clair
Mitra, Nirmal K., Kansas City
Mixson, William C., Kansas City
Moellenhoff, Robert W., Washington
Moen, Berwyn H., St. Joseph
Molden, Charles A., St. Louis
Monafo, William W., Jr., St. Louis
Monat, Seymour, St. Louis
Monroe, C. Dean, Columbia
Montani, Charles, St. Louis
Montello, Samuel A., Kansas City
Montes, Arturo C., St. Louis
Montes-de-Oca, Julio, St. Louis
Montgomery, Austin F., St. Louis
Moon, Thomas R., Jr., St. Louis
Mooney, Justin L., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Mooney, Marcel L., Kansas City
Moore, Allen H., Jr., Branson
Moore, Alva, St. Louis
Moore, De Armond, Springfield
Moore, Harry G., St. Louis
Moore, Harry G., Jr., St. Louis
Moore, Robert A., Kansas City
Moore, Walter L., St. Louis
Moranville, Benedict A., Columbia
Moreano, Armando H., Kansas City
Morehead, William E., Malden
Morest, F. Stanley, Dunedin, Fla. (Member Jackson County Medical Society)
Morgan, David B., Kansas City
Morgan, Harry C., St. Louis
Morgan, Marvin W., Poplar Bluff
Morgan, Philip E., Columbia
Morgan, Stephan S., St. Louis
Morgan, Troy O., Jr., Albany
Morgan, W. Thomas, Jr., West Plains
Morley, Louise A., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Morrin, Kevin C., St. Louis
Morris, Alan H., St. Louis
Morris, Harvey E., St. Louis
Morris, Joseph H., Jr., Kansas City
Morris, Mary E., St. Louis
Morris, R. William, St. Louis
Morrison, Arlen, St. Louis
Morrison, Donald H., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Morrison, J. Scott, Kansas City
Morrison, T. A., Aurora
Morrissey, James D., Stockton, Calif. (Member St. Louis Medical Society)
Morse, John P., St. Joseph
Morse, Marvin, St. Joseph
Mortensen, Frede, St. Louis
Morton, Paul C., Springfield
Mosbacher, Hugh E., Independence
Mosby, Larry Dee, Columbia
Moseley, F. Thomas, Springfield
Moseley, Otis O., Osage Beach
Moses, Robert A., St. Louis
Moss, Paul, Kansas City
Mosser, Robert S., Overland Park, Kan. (Member Jackson County Medical Society)
Mothershead, John L., St. Joseph
Motzel, Albert J., St. Louis
Mou, Bin, Nevada
Mountjoy, Grace S., St. Louis
Mowrer, Marie O., St. Louis
Mowrey, William O., Jennings
Muckerman, Richard I. C., St. Louis
Mudd, J. Gerard, St. Louis
Muelheims, Gerhard H., St. Louis
Mueller, Adolph R., Jr., Joplin
Mueller, Clarence E., St. Louis
Mueller, Joseph A., St. Louis
Mueller, Martin J., Kansas City
Mueller, Morris A., St. Louis
Mueller, Robert, St. Louis
Mueller, Robert J., St. Louis
Mueller, Wilbur K., St. Louis
Muench, Albert H., St. Joseph
Muenster, Vincent P., St. Charles
Muether, Raymond O., St. Louis

Muhm, Harvard Yale, St. Charles
Mullarky, Wilbur A., Chesterfield
Mullen, Jack, Bonne Terre
Mullen, Leo M., Kansas City
Mulligan, Leo V., St. Louis
Mullinax, Orr, St. Joseph
Mullins, Bernard L., N. Kansas City
Mullins, John E., St. Louis
Mullins, Maurice F., Columbia
Mundy, Homer F., St. Joseph
Mundy, William L., Kansas City
Munsch, Girard A., St. Louis
Murdock, Nathaniel H., St. Louis
Murney, Joseph A., Washington
Muro, F. Del, Kansas City
Murphy, Bernard L., Hannibal
Murphy, George E., St. Louis
Murphy, James J., Kansas City
Murphy, James P., St. Louis
Murphy, John C., St. Louis
Murphy, Michael G., St. Louis
Murphy, Paul, St. Louis
Murphy, Robert J., Kansas City
Murray, Wilber L., Kansas City
Muschany, Norman K., St. Louis
Musgrave, David E., Excelsior Springs
Muth, Robert G., Kansas City
Myers, Ivan T., St. Louis
Myers, James M., Rolla
Myers, John S., Kansas City
Myers, Robert M., Kansas City

N

Nahm, Chung Chick, St. Louis
Naime, Mansour J., Kansas City
Nakada, James R., St. Louis
Napper, Marvin L., Springfield
Nalagan, Marcos C., St. Louis
Naryka, Joseph J., St. Louis
Nash, Helen E., St. Louis
Navato, Jose, Manchester
Neal, M. Pinson, Columbia
Near, David M., Florissant
Negrete, Abelardo, N. Kansas City
Nelson, Bentley A., Kansas City
Nelson, J. Roger, Kirkwood
Nelson, James S., St. Louis
Nemec, Stanley S., St. Louis
Ness, Carl K., St. Joseph
Nesselrode, John H., Independence
Nester, Charles A., St. Louis
Neu, Leo T., Jr., Springfield
Neubeiser, Ben L., St. Charles
Neumann, James W., Kansas City
Neun, William F., St. Louis
Newcomb, Arthur D., Fredericktown
Newman, Percy, St. Louis
Newman, Robert L., Kansas City
Newmark, Leonard N., St. Louis
Newport, Gerald, St. Louis
Newton, Gordon, St. Louis
Newton, William T., St. Louis
Nickel, James F., St. Louis
Nickels, Mathew L., Louisiana
Nickson, Charles E., Jr., Independence
Nicolai, Charles H., St. Louis
Niedermeyer, Edward L., Tarkio
Niedermeyer, George J., St. Louis
Niesen, Frank J., St. Louis
Nieuwenhuizen, Maarten, Columbia
Nigh, Charles A., St. Louis
Nigro, E. Robert, Kansas City
Nigro, Joseph A., Kansas City
Nishi, Toshio, St. Louis
Nixon, Edward E., Gallatin
Noback, Richardson K., Kansas City
Nolan, Charles J., St. Louis
Noller, Henry W., Overland
Nolph, Georgia B., Columbia
Noltensmeyer, Milton N., Kansas City
Nomura, Roy M. Y., St. Louis
Norland, Charles C., St. Louis
Nouhan, Joseph G., Jr., St. Louis
Nouri, Hassan, St. Louis
Novak, Edward J., Kansas City
Nuetzel, John A., St. Louis
Nukrongsin, Somporn, St. Louis
Nunez, Maria M., St. Louis
Nunnelly, Gordon M., Cape Girardeau
Nussbaum, Paul B., Cape Girardeau
Nussbaum, Robert A., St. Louis
Nye, Robert S., St. Louis

O

Oakley, Margaret M., St. Louis
Obando, Francisco J., Troy
O'Bannon, Lon W., Jr., Florissant
Obermeyer, Charles G., St. Louis
O'Brien, Edward C., St. Louis
O'Brien, Harry F., Mexico
O'Brien, Liam, St. Joseph
O'Brien, Robert M., St. Louis
O'Connor, Robert J., Florissant
O'Connor, William B., St. Joseph
O'Donnell, Joseph V., St. Louis
O'Dowd, James A., St. Louis
Oehler, William F., Cape Girardeau
Oestreich, Alan, Columbia
Oetter, Donald L., St. Louis
O'Farrell, Thomas P., Kansas City
Ogilvie, John H., Gravois Mills
Oglesby, Richard B., St. Louis
Ognyanov, V. F., St. Louis
Ogura, Joseph H., Ladue
O'Hearne, John J., Kansas City
Ohlms, David L., St. Louis
Ohmoto, Masao, St. Louis
Ojascastro, Alejandro C., St. Louis
O'Keefe, Joseph D., St. Louis
O'Kell, Richard T., Kansas City
Okun, Edward, St. Louis
O'Leary, James L., St. Louis
Olive, George C., Neosho
Oliver, George A., Farmington
Olmsted, William H., St. Louis
Olney, John W., St. Louis
Olson, Elbert R., Springfield
Olson, Robert E., St. Louis
O'Malley, James F., Kansas City
O'Neal, Lawrence W., St. Louis
O'Neal, Patricia, St. Louis
O'Neil, James H., Kansas City
Onken, Henry D., St. Louis
Oppenheimer, Henry E., Clayton
Ordoukhanian, Tatool, St. Charles
O'Reilly, D. Elliott, St. Louis
Orenstein, Joseph M., University City
Orgel, M. Norman, St. Louis
Orgel, Michael, St. Louis
Orsay, Paul K., St. Louis
Orth, Oliver G., Columbia
Ortiguero, Leopoldo M., St. Louis
Ortillo, Amado P., St. Louis
Ortmeyer, Leroy F., St. Louis
Osborn, Retus W., III, Chillicothe, Ohio
(Member Mineral Area County Medical Society)
Osborne, Jere O., Kansas City
Osbourn, Richard A., Fulton
Ossman, Julian A., Jefferson City
Ost, Mark D., Kansas City
Ostapowicz, Frank, St. Louis
O'Sullivan, Daniel F., St. Louis
O'Sullivan, George A., St. Louis
Ott, F. Thomas, Glendale
Ott, Harold J., II, St. Louis
Ott, Harold J., Maplewood
Ottensmeyer, Charles D., St. Louis
Otto, Thomas G., Cape Girardeau
Ottolini, James L., Creve Coeur
Overend, Donald S., Springfield
Overesch, Harry B., Kansas City
Overholser, Milton D., Columbia
Owen, Robert F., St. Louis
Owens, James L., Kansas City
Owens, John H., Sedalia
Owens, Richard L., Kansas City
Owens, Robert H., Kansas City
Ozar, Milton B., Kansas City
Ozenberger, Larry A., Plattsburg
Ozmat, Orhan, St. Louis

P

Packman, Robert C., St. Louis
Paddock, Charles S., Joplin
Padfield, Earl G., Jr., Kansas City
Padilla, Teresita C., St. Louis
Page, Jesse W., Sikeston
Paine, Robert, St. Louis
Painter, Andrew E., Portageville
Painter, Lattie B., Jr., Portageville
Pak, Y. S., St. Joseph
Pakula, Sidney, Kansas City
Palazzo, Frank A., St. Louis
Palcheff, Chris L., Springfield
Palenske, Robert L., Hornersville
Paletta, Francis X., St. Louis
Paletta, Theodore L., St. Louis
Palmer, Lily Ann, Webster Groves
Pangilinan, Antonio G., Milwaukee, Wis.
(Member St. Louis Medical Society)
Papp, Sandor D., Joplin
Pappalardo, Carlos, St. Louis
Parato, John M., St. Louis
Parelman, Allen G., Kansas City
Paris, William H., Normandy
Park, Agatha Lee, St. Louis
Park, Duk Jae, St. Louis
Park, William I., Jr., Springfield
Parker, Arthur C., Jr., Poplar Bluff
Parker, Brent M., Columbia (Member St. Louis County Medical Society)
Parker, Hubert M., Kansas City
Parker, Robert H., Kansas City
Parker, Thomas W., University City
Parker, William, St. Louis
Parkison, Donald E., Seligman (Member Ozarks Medical Society)
Parlato, George S., Springfield
Parsi, Manutchehr K., St. Louis
Parsons, D. LeRoy, Cape Girardeau
Parsons, Eugene O., Stilwell, Kan.
(Member Jackson County Medical Society)
Parsons, Richard P., St. Louis
Pascoe, James J., Nevada
Passanante, Bartholomew M., St. Louis
Patrick, Roman L., Jr., St. Louis
Patterson, Donald R., Joplin
Patterson, Grover S., Carthage
Patton, Douglas S., St. Louis
Paulson, Gordon S., St. Joseph
Pavlu, Robert R., Waverly
Pawol, S. E., St. Louis
Pawsat, John E., Kansas City
Payne, David E., Columbia
Payne, John W., Columbia
Payne, Meredith J., St. Louis
Payne, Vaughn C., St. Louis
Pearlman, Alan L., St. Louis
Pearman, Carl C., Columbia
Pearse, Roy W., Jr., Nevada
Pearson, Paul E., Kansas City
Peck, Chester R., Jr., Kennett
Peden, Burnet W., Clayton
Peden, James C., Jr., St. Louis
Peden, Joseph C., St. Louis
Peden, Joseph C., Jr., St. Louis
Pedersen, Harold J., Ballwin
Peebles, J. B., Jr., Kirkwood
Peete, Don C., Kansas City
Pelz, Mort D., St. Louis
Pence, F. Wendell, Carthage
Pendell, Paul W., Rolla
Penilla, Antonio R., St. Louis
Penner, Stanley, Kansas City
Penninger, William H., Springfield
Pennington, Francis E., St. Louis
Pennoyer, James, Webster Groves
Pepper, Edward G., St. Louis
Pepper, Max, St. Louis
Perez, Blanca M., St. Louis
Perez, Carlos A., St. Louis
Perez, Raul A., St. Louis
Perez-Mesa, Carlos, Columbia
Perico, Carlos J., Kansas City
Perkins, David E., St. Louis
Perkoff, Gerald T., St. Louis
Perll, Maurice F., Kansas City
Perll, Rita D., Kansas City
Perna, Vincent P., Creve Coeur
(Member St. Charles-Lincoln County Medical Society)
Pernoud, Flavius G., Jr., St. Louis
Pernoud, Michael F., St. Louis
Perry, H. Mitchell, St. Louis
Perry, Ralph, Kansas City
Perry, William D., St. Louis
Petersen, Eugene G., Lee's Summit
Petersen, Harold E., St. Joseph
Peterson, Bonita J., Kansas City
Peterson, Carl M., Kansas City
Peterson, Donald B., Fulton
Peterson, Frederick D., St. Louis
Peterson, George L., Kansas City
Peterson, Milton C., Sun City, Ariz.
(Member Jackson County Medical Society)
Peterson, Stanley S., Springfield
Peterson, Vernon J., Columbia
Peterson, Walter R., Kansas City
Petit, Carlos A., Aurora
Petry, Ezra L., Lenexa, Kan.
(Member Jackson County Medical Society)
Pfefer, Leland U., Columbia
Pfeffer, Robert I., St. Joseph
Pfeifer, Oliver C., St. Louis
Philip, Varkey, St. Louis
Phillips, Granville J., Jr., El Paso, Tex.
Phillips, Hanford, St. Louis (Member St. Louis Medical Society)
Phillips, John J., St. Louis
Phillips, William J., St. Louis
Philpott, Gordon W., St. Louis
Phipatanakul, Supote, St. Louis
Piccione, Leonard N., St. Louis
Pichardo, Javier, Farmington
Pickard, Clarence M., Columbia
Pickard, Nicholas S., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Pickens, E. Allen, St. Louis
(Member West Central Missouri Medical Society)
Pickens, James Milton, Columbia
Piebenga, Larry W., Kansas City
Piepergerdes, Larry G., Kansas City
Pierron, John B., Kansas City
Pifer, Lawrence H., St. Joseph
Pileggi, Felix A., N. Kansas City
Pilla, Lawrence A., St. Louis
Pimentel, Esperanza, St. Louis

Pineda, Hector O., St. Louis
Pingelton, William B., Columbia
Pinkerton, Joseph A., Jr., Kansas City
Pinkstaff, Thomas H., Sikeston
Pinsker, Oscar T., Kansas City
Piper, August T., St. Louis
Piper, Donald K., Kansas City
Pipes, Keith E., St. Louis
Pipkin, Garrett, Wichita, Kan. (Member Jackson County Medical Society)
Pitsinger, Nolan B., St. Louis
Pittman, Susan, St. Louis
Pitts, Ferris N., Jr., St. Louis
Pizzimbono, Carlos A., St. Louis
Platt, William R., Clayton
Platz, John H., Carrollton
Plax, Steven, St. Louis
Plesons, John D., St. Louis
Plowman, Edward M., Hannibal
Plumpe, W. Tupper, St. Louis
Plunkett, Littleton J., Poplar Bluff
Podos, Steven M., St. Louis
Podrecca, Guido I., Springfield
Poggemeier, William H., Jr., St. Charles
Pojanasomboon, Pichat, Rolla (Member St. Louis Medical Society)
Politi, Gregory B., Columbia
Politte, Lenard L., Columbia
Polk, George M., Sun City, Ariz. (Member Jackson County Medical Society)
Pollock, Leo H., Kansas City
Pontillas, Job B., Perryville
Poonawala, Huseni E., Kansas City
Poor, Carl W., Neosho
Pope, Charles H., Jr., Kansas City
Popp, Carl G., Sikeston
Porporis, Arthur A., St. Louis
Porter, Louis, Kansas City
Porter, Russell C., Long Beach, Calif. (Member Clay County Medical Society)
Portugal, Antonio Q., St. Louis
Portuondo, Bonaventura C., St. Louis
Post, John P., Washington
Post, John R., Washington (Member St. Louis Medical Society)
Post, Lawrence T., Jr., St. Louis
Post, Stephen L., St. Louis
Post, Winfred L., Joplin
Potashnick, Robert, St. Louis
Potchen, E. James, St. Louis
Potter, Caryl A., Jr., St. Joseph
Potter, Lee G., Kansas City
Potter, Reese H., St. Louis
Potts, Donald A., Independence
Powell, Alan E., Independence
Powell, Charles B., Florissant
Powell, Earl A., St. Louis
Powell, Edwin M., Springfield
Powell, Nelson E., Kansas City
Powell, Robert G., Joplin
Powers, John M., Independence
Powers, Pierce W., St. Louis
Powers, William E., St. Louis
Prater, Bill G., Springfield
Pratt, Lindsay L., St. Louis
Prensky, Arthur L., St. Louis
Presant, Cary A., St. Louis
Presnell, Cleitus A., St. Louis
Preston, Albert, Jr., Kansas City
Price, Kenneth C., St. Louis
Price, Robert L., Chesterfield
Prieto-Basa, Nenita, St. Louis
Printz, Joseph H., Kansas City
Printz, Otto J., Kansas City
Probst, Raymond E., St. Louis
Probstein, Jacob G., St. Louis
Proctor, Donald C., Sedalia
Prokop, Joseph R., St. Joseph
Prophete, B., St. Louis
Proskey, Vincent J., St. Louis
Pruett, Burchard S., St. Louis
Pruett, Don S., St. Louis
Pruett, Hubert S., St. Louis
Pruett, Paul L., Springfield
Pryor, Ira Joe, Joplin
Pu, Pin H., Kennett
Pucci, Gregory L., Kansas City
Pugh, Daniel D., St. Louis
Pugh, Reginald P., Columbia
Pugh, Richard G., Independence
Purcell, Harry K., St. Louis
Purcell, Paul L., Smithville (Member Marion-Ralls-Shelby County Medical Society)
Pyne, Herbert S., St. Louis
Pyron, Katharine A., Kansas City (Member Clay County Medical Society)

Q

Quer, Erich A., Kansas City
Quick, Richard T., St. Louis
Quinn, Paul S., Springfield
Quistgard, Paul C., Hollister

R

Rabin, Erwin R., St. Louis
Racadio, Severo M., Kirkwood
Racela, Antonio S., Jr., Kansas City
Rachlin, Maxwell, St. Louis
Rader, Ada B., Kansas City
Rader, Edward S., St. Louis
Rader, George B., St. Louis
Radke, John D., St. Louis
Ragland, Jerry, Warrensburg
Ragland, John E., Ballwin
Ragsdale, George M., Paris
Rahman, Moududur, St. Louis
Raich, Robert A., Kansas City
Raines, Oney C., III, N. Kansas City (Member Clay County Medical Society)
Rainey, Robert, St. Louis
Rainwater, Elmer H., Springfield
Rall, Kenneth L., Columbia
Ramey, Ehret O., Kansas City
Ramirez, Ricardo M., Poplar Bluff
Ramirez, Samuel G., St. Louis
Ramos, Americo G., Kansas City
Ramsey, Robert H., Florissant
Randolph, Bernard C., St. Louis
Rankin, Diane, St. Louis
Rannie, Paul R., Independence
Rao, Carlo, St. Louis
Raper, Charles A., Poplar Bluff
Raphel, Jose, St. Joseph
Rapp, Earl L., Hannibal
Rapp, Harold B., Cape Girardeau
Rappold, H. O., St. Ann
Rauch, James E., Kansas City
Rawlins, Fred E., Cape Girardeau
Raybuck, Harry E., St. Louis
Raynor, Richard, Marshall
Raza, Syed A., St. Louis
Razek, A., St. Louis
Recano, Ricardo Q., St. Louis
Rector, Joe L., Jr., Kansas City
Reddin, Jack L., Independence
Reddin, Patrick C., Columbia
Reddy, Kamalesh K., Kansas City
Reddy, Sarvotham K., Poplar Bluff
Redington, James C., Jr., Clayton
Redmond, William, St. Joseph
Reed, G. H., Appleton City
Reed, Jonathan R., St. Louis
Reed, William A., Kansas City
Reeder, Charles C., Smithville
Reese, A. Victor, St. Louis
Reese, Lester T., St. Louis
Reh, Edward P., St. Louis
Rhem, Ralph, Dexter
Reich, Harry A., St. Louis
Reichert, M. Cecelia, St. Louis
Reiches, Aaron J., St. Louis
Reid, James A., Marshall
Reider, Richard A., Warson Woods
Reimer, Donald R., Topeka, Kan. (Member Cape Girardeau County Medical Society)
Reineck, John A., St. Louis
Reinhard, Edward H., St. Louis
Reinhardt, George R., Kansas City
Reisa, Ronald C., St. Charles
Reisler, David M., St. Louis
Reiss, Jeanne E. L., Kansas City
Reister, Dorothy D., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Reister, Philip D., Kansas City
Reitman, Stanley, St. Louis
Rendleman, David D., St. Louis
Rendleman, George F., St. Louis
Rendleman, George, Jr., St. Louis
Rengachary, Dhanalaksbmi, Kansas City
Rennard, Marvin, St. Louis
Repaso, Florante A., Sullivan (Member St. Louis County Medical Society)
Repp, Theodore J., St. Louis
Reuter, Louis A., St. Louis
Revare, Paul, Kansas City
Reyes, Jose T., St. Louis
Reyes, Luis A., St. Louis
Reyes, Rosendo A., St. Louis
Reynolds, Clarence C., Kansas City
Reynolds, Fred, St. Louis
Reynolds, Garland A., Cape Girardeau
Reynolds, James A., Warson Woods
Reynolds, M. Wayne, Warrensburg
Rhee, Dong S., St. Louis
Rhee, Seoung Eun, St. Louis
Rhee, Young Wung, St. Louis
Rhoades, Arthur B., Lenexa, Kan. (Member Jackson County Medical Society)
Ricci, Walter F., Kansas City
Rice, Carl E., Crystal City
Rice, Ronald, St. Charles
Richany, Shafik F., Kansas City
Richards, Frank O., St. Louis
Richardson, George A., Union
Richardson, Marion W., Kansas City
Richardson, Thomas F., St. Louis
Richardson, William R., Union
Richman, Elmer, Chesterfield
Richmond, Michael R., Florissant
Riddell, Richard V., St. Joseph
Ridenhour, C. E. Gene, Columbia
Ridgeway, William G., St. Louis
Ridings, Harold D., Cape Girardeau
Riekhof, Paul L., Kansas City, Kan. (Member Jackson County Medical Society)
Ries, Douglas A., St. Louis
Riffel, Gordon W., Bourbon
Riggio, Salvatore N., St. Louis
Rigney, Levi M., Springfield
Rikli, Arthur E., Columbia
Riley, Charles T., Richmond
Riley, John J., St. Louis
Riley, Joseph P., Jr., Parthenon, Ark. (Member Jackson County Medical Society)
Riller, Lowell E., Kansas City
Rinck, Edward C., Nevada
Rinck, William E., Kansas City
Ring, Edward M., St. Louis
Rink, Richard A., Columbia
Rinker, Carl T., Jr., Springfield
Riordan, Robert H., Kansas City (Member Platte County Medical Society)
Rippey, John H., Kansas City
Rising, Dean R., Springfield
Ritchie, Frances R., St. Louis
Ritter, C. John, Cape Girardeau
Ritter, Carl F., Cape Girardeau
Ritter, Hubert A., St. Louis
Ritter, Paul J., St. Louis
Ritter, Raymond A., Cape Girardeau
Ritter, Raymond A., Jr., Cape Girardeau
Ritterbusch, James K., Fulton
Rizzo, Adolfo E., St. Louis
Rizzo, Marco, St. Louis
Roach, Edward A., St. Charles
Robb, Harold Phillip, Jefferson City
Robben, G. Garry, St. Louis
Robbins, Judy C., Springfield
Roberts, Grosvenor G., Lee's Summit
Roberts, Harold K., Clayton
Roberts, Harold M., Kansas City
Roberts, Howard H., Joplin
Roberts, John P., Kirkwood
Roberts, John R., St. Louis
Roberts, Paul A., Sweet Springs
Roberts, Phyllis Grant, St. Joseph
Robertson, Frank G., St. Louis
Robertson, William D., Poplar Bluff
Robertson, William D., Kansas City
Robichaux, Eugene B., Excelsior Springs
Robinett, Wade V., Kansas City
Robins, Eli, St. Louis
Robinson, Arthur W., Kansas City
Robinson, Edith C., St. Louis
Robinson, E. Kip, Kansas City
Robinson, Gary Lewis, Springfield
Robinson, George G., Humansville
Robinson, Robert R., Jr., Columbia
Robinson, Van M., N. Kansas City (Member Clay County Medical Society)
Robinson, William J., Kansas City
Roblee, Melvin A., St. Louis
Roche, Maurice B., St. Louis
Roddy, Hugh John, St. Louis
Rodes, Ned D., Mexico
Rodgers, Elrie P., Columbia
Rodgers, George H., Overland Park, Kan. (Member Jackson County Medical Society)
Rodgers, Samuel U., Kansas City
Rodriguez, Gregorio L., Charleston
Rodriquez, Rolando A., Kansas City
Rodriguez, Ubaldo R., St. Louis
Roehrs, Marvin E., Marshall
Rofail, Amin A., Kansas City
Rogers, Hunter Bryan, St. Louis
Rogers, John A., Clayton
Rogers, John T., St. Joseph
Rogers, Robert L., Kansas City
Rohlfing, Edwin H., St. Louis
Roller, Merrill J., Hannibal
Romero, Richard N., Crystal City
Roos, Albert, St. Louis
Roper, Charles L., St. Louis
Roper, Stanley D., Ozark
Rose, Charles W., Kansas City
Rose, Dalton K., St. Louis
Rosecan, Marvin, St. Louis
°Rosell, Louis V., St. Louis
Rosen, Max, Springfield
Rosenbaum, Harry D., St. Louis
Rosenbaum, Herbert E., St. Louis
Rosenfeld, Henry, St. Louis
Rosenholtz, Mitchell J., Columbia
Rosenstein, Daniel Lesem, Columbia

° Doctor of Osteopathy.

Rosenthal, Irwin I., St. Joseph
Rosenthal, Randall, Clayton
Rosenthal, Ronald E., St. Louis
Ross, Gilbert, Jr., Columbia
Rost, William B., St. Joseph
Roter, Alexander M., St. Charles
Roth, Alfred D., Kansas City
Roth, John J., St. Louis
Rother, Paul H., St. Charles
Rothman, David, St. Louis
Rothweiler, Robert J., St. Louis
Roufa, Joseph F., St. Louis
Roulhac, George E., St. Louis
Rouse, Ernest T., St. Louis
Roush, George, Jr., St. Louis
Roxas, Generoso P., St. Charles
Roy, Joseph A., Jennings
Royce, James J., Sarcoxie
Royce, Robert K., St. Louis
Royse, Roy P., Sullivan
Royston, Grandison D., Address unknown (Member St. Louis Medical Society)
Rozen, Jay I., Kansas City
Ruhenstein, Melvin, St. Louis
Rubin, Harvey P., Kansas City
Rubin, Robert, St. Louis
Rubin, Sidney, Kansas City
Rubnitz, Leon H., Kansas City
Rudi, Herbert J., St. Louis
Rufe, John R., Kansas City
Ruff, T. Eugene, Poplar Bluff
Ruhling, Rudy, St. Louis
Runez, Manuel W., St. Louis
Rusan, Thomas E., St. Louis
Russell, Barbara E., Rolla
Russell, Earl D., Springfield
Russell, Garth, Columbia
Russell, Herman E., Berkeley
Russell, James L., Kansas City
Russell, Joseph P., Jefferson City
Russell, Robert K., Raytown
Rutledge, John F., Festus
Rutledge, William J., Campbell
Ryan, David L., Trenton
Ryan, John B., Washington
Ryan, John H., St. Joseph
Ryan, John J., St. Louis
Ryan, Robert E., St. Louis
Ryan, Thomas J., Jefferson City

S

t. John, Thomas C., St. Louis
abates, Felix N., Kansas City
achar, Leo A., St. Louis
afdar, Shabbir, St. Louis
aferstein, Lester, Kansas City
aghir, Marcel, St. Louis
aha, Nitai C., Ballwin
aha, Sudha R., Ballwin
ala, Jose M., Springfield
aladino, Anthony, Shawnee Mission, Kan. (Member Jackson County Medical Society)
alanga, P. B., St. Louis
ale, Llewellyn, Jr., St. Louis
almon, Mickey L., St. Louis
ammons, Harry C., St. Louis
amuelson. Edward A., Kansas City
anchez, Abelardo B., St. Louis
anchez, Salvador Valera, St. Joseph
anders, Donald C., Kansas City
anders, George E., Excelsior Springs
anders, Harmon U., Jr., Greenwood, Miss. (Member Jackson County Medical (Society)
anders, Jack S., Jefferson City
anders, Robert D., St. Louis
anders, Theodore E., St. Louis
anders, William F., Kansas City
andidge, Ernie L., Houston, Tex. (Member Semo County Medical Society)
andow, Theodore, Jr., Kansas City
antanello, William M., Fairview Heights, Ill. (Member St. Louis Medical Society)
antillano, Antonio B., St. Louis
antoro, Carlos G., Kansas City
antos, Romeo I., Kennett
argent, Alden P., Sikeston
argent, John P., Sikeston
arma, Kurella T., St. Louis
asser, William F., St. Louis
ato, George, St. Louis
auer, Donald C., St. Louis
auer, Gordon C., Kansas City
auer, Paul E., Springfield
auer, W. Nicholas, St. Louis
auvage, Jacques, St. Louis
avci, Hasan D., St. Louis
awyer, Floyd E., Kansas City
awyer, James, St. Louis
axena, Narendra M., Mt. Vernon
cales, Margaret B., Kansas City

Scanlon, Robert C., Springfield
Schaan, Robert C., St. Louis
Schaef, Mary L., St. Louis
Schaefer, George J., St. Louis
Schaefer, Glennon S., Jr., St. Louis
Schaeffer, Edward M., Springfield
Schaerer, Jacques P., St. Louis
Schaerrer, William C., Kansas City
Schaper, Ernest H., St. Louis
Schechter, Samuel E., St. Louis
Scheele, Paul M., St. Louis
Scheer, George E., St. Louis
Scheff, Harold, St. Louis
Scheibe, Robert G., St. Louis
Schengber, John S., St. Louis
Schertz, Truman B., N. Kansas City
Scheuber, Charles, Columbia
Schewe, Elmer J., Jr., Columbia
Schierman, William D., St. Louis
Schiffmacher, Jack E., Kansas City
Schillie, Gene A., Kansas City
Schlansky, Seymour M., St. Louis
Schlozman, Daniel L., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Schluer, Elmer P., St. Louis
Schmidt, C. Robert, Kansas City
Schmidt, Charles A., Gerald
Schmidt, Dennis A., St. Louis
Schmidt, Edwin H., St. Louis
Schmidt, Edmund M., St. Louis
Schmidt, Herbert J., Joplin
Schmidt, J. H., Jefferson City
Schmiemeier, Roy H., St. Louis
Schneider, Sam, St. Louis
Schneider, Thomas A., St. Charles
Schoeberl, Cletus B., Joplin
Schoeck, Albert F., St. Louis
Schoedinger, George R., III, St. Louis
Schoenberg, Harry W., St. Louis
Schoentag, John S., St. Louis
Schokker, Johannes, Jefferson City
Schoolman, Arnold, Kansas City
Schopp, Alvin C., St. Louis
Schottman, Gerhard W., Jr., Kansas City
Schranck, Charles R., St. Louis
Schreiber, Norman J., Springfield
Schroeder, Henry A., W. Brattleboro, Vt. (Member St. Louis Medical Society)
Schroff, Carle H., Springfield
Schuessler, Wolfgang P., St. Louis
Schuetz, Alfred, St. Charles
Schulte, Gregory A., Joplin
Schultz, E. Robert, St. Louis
Schultz, Irwin, St. Louis
Schultz, Loraine E., Lubbock, Tex. (Member Ozarks County Medical Society)
Schultz, Robert V., Liberty
Schultz, Samuel, St. Louis
Schutz, Carl B., San Marcos, Calif. (Member Jackson County Medical Society)
Schutz, John P., Excelsior Springs
Schutz, Richard B., Kansas City
Schwartz, Eugene J., Springfield
Schwartz, Frederick O., St. Louis
Schwartz, Henry G., St. Louis
Schwartz, Melvin M., St. Louis
Schwartzman, Bernard, St. Louis
Schwarz, Luis, Clayton
Schweiss, John F., St. Louis
Sciortino, Gaspare, St. Louis
Sciortino, John S., St. Louis
Scopelite, Joseph A., St. Louis
Scorse, Sidney W., Joplin
Scott, E. David, Jefferson City
Scott, Elwin P., St. Louis
Scott, Horace W., St. Louis
Scott, Kenneth F., Jr., Camp Pendleton, Calif. (Member Boone County Medical Society)
Seabaugh, Loy R., Cape Girardeau
Seabaugh, Ottis D., Webster Groves
Seabaugh, William O. L., Cape Girardeau
Seddon, John W., St. Louis
See, William B., Columbia
Seeley, James J., St. Louis
Seely, Clark W., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Seevers, Ruth, Osceola
Seib, George A., St. Louis
Seiden, Gerald D., Kansas City
Sells, Kenneth J., Kansas City
Sengupta, Dipak K., St. Louis
Senhauser, Donald A., Columbia
Senn, Emmett J., Herculaneum
Senne, Herbert C., St. Joseph
Sennott, John S., Jefferson City
Senor, Samuel E., St. Joseph
Senturia, Ben H., St. Louis
Senturia, Hyman R., St. Louis
Sertl, James F., Ballwin
Sertl, John D., St. Louis

Sessions, Donald G., St. Louis
Sethabutra, Chaisiri, St. Louis
Sevastianos, Aristides E., St. Louis
Sevin, Omar R., Rockhall, Md. (Member St. Louis Medical Society)
Sexton, Daniel L., St. Louis
Sexton, Elmer E., St. Louis
Shackelford, Horace H., St. Louis
Shackter, Bruce I., Springfield
Shah, Anwar, St. Louis
Shah, Naheed F., St. Louis
Shahan, Philip T., St. Louis
Shaikun, Gerald L., Chesterfield
Shalet, Malcolm F., Kansas City
Shanahan, Mary Patricia, Joplin
Shanahan, Phil J., St. Louis
Shane, Ramon A., Springfield
Shaner, John F., St. Louis
Shank, Robert E., St. Louis
Shapiro, Herbert N., St. Louis
Shapiro, Lazare M., Kansas City
Shapleigh, John B., St. Louis
Sharp, Austin R., Ballwin
Shatz, Burton A., St. Louis
Shaw, Robert F., Liberty
Shaw, William J., Jr., Fayette
Shea, James G., Washington
Sheahon, John A., Kansas City
Shechter, Nathan, Kansas City
Sheffield, William, St. Louis
Shelden, Russell D., Kansas City
Shell, William C., Sikeston
Shelton, Earl W., St. Louis
Shelton, Edward O., Eldon
Shen, Jerome T. Y., St. Louis
Sheridan, Edmund R., St. Louis
Sherman, Laurence A., St. Louis
Sherman, Warren G., Manchester
Sherwin, Charles S., St. Louis
Shevlin, Charles F., St. Joseph
Shieber, William, St. Louis
Shields, J. B., St. Louis
Shifrin, Alexander, Kansas City
Shipley, William A., Columbia
Shireman, Kenneth L., Kansas City
Shirey, Arnold G., Hayti
Shively, John A., Columbia
Shobe, Frank O., St. Louis
Shockley, Clarence J., Greenwood
Shoss, Milton, Cape Girardeau
Shriver, Ronald G., Poplar Bluff
Shuey, Herbert H., Kansas City
Shull, George D., Jefferson City
Shuman, Joseph S., St. Louis
Shumate, L. St. Clair, Reeds Spring
Shyken, Herman, St. Louis
Shypper, Moses J., Van Nuys, Calif. (Member Jackson County Medical Society)
Siceluff, Joseph G., Springfield
Siegel, Carl D., Kansas City
Siemers, George E., St. Louis
Siesener, Herbert H., St. Louis
Sievers, Edward F., Hollywood Beach, Fla. (Member St. Louis Medical Society)
Sights, Warren P., Jr., Columbia
Sigmund, Charles A., St. Ann
Signorelli. Andrew J., St. Louis
Silliman, York E., Joplin
Silsby, Don J., Springfield
Silsby, Harry D., Springfield
Silver, Bernd, St. Louis
Silverberg, Charles, St. Louis
Silvermintz, Saul D., Ladue
Simbari, Bernard J., Milwaukee, Wis. (Member St. Louis Medical Society)
Simmons, Donald D., Kansas City
Simmons, Earl M., Jr., Columbia
Simmons, Jess S., Jr., Joplin
Simmons, John L., St. Louis
Simms, Otho M., St. Charles
Simon, David L., St. Louis
Simon, Jerome I., St. Louis
Simon, Nathan M., Clayton
Simon, Sanford, Kansas City
Simowitz, Fredric M., St. Louis
Simpson, Albert P., Springfield
Simpson, Emerson L., Springfield
Simril, Wayne A., St. Louis
Sims, William A., Jr., St. Louis
Sinclair, Richard H., Kansas City
Singhal, Gokul S., St. Louis
Singhal, Renu, St. Louis
Singleton, Chas. M., II, Kansas City
Singleton, John M., III, Kansas City
Singleton, Marvin A., Joplin
Sirridge, Marjorie S., Kansas City
Sirridge, William T., Kansas City
Sisk, James C., St. Louis
Sisler, Maynard Lee, Kennett
Sisson, Richard G., St. Louis
Siu, Kenneth K. C., Jefferson City
Skeffington, Mary Jane, St. Louis
Skilling, David M., Jr., St. Louis

Doctor of Osteopathy.

Skillman, Robert K., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Skimming, W. Lee, Olivette
Skinner, John S., St. Louis
Skinner, John T., Kansas City
Sklenar, Donald E., St. Joseph
Slankard, J. Edward, Kansas City
Slaughter, Carl R., Kansas City
Slaughter, Shelby C., Fredericktown
Slentz, Edwin L., Kansas City
Slentz, William A., Kansas City
Sletten, Ivan W., St. Louis
Slickman, Robert A., Kansas City
Sly, William S., St. Louis
Smiley, William, St. Louis
Smit, Herbert M., St. Louis
Smith, Arthur B., Kansas City
Smith, Benjamin F., Jr., St. Louis
Smith, C. Franklin, Willow Springs
Smith, C. Souter, Springfield
Smith, Dermott, St. Louis
Smith, Elbert E., III, Kansas City
Smith, Emily, St. Louis
Smith, Garland F., St. Louis
Smith, Herbert P., St. Louis
Smith, Hubert E., Kansas City
Smith, Hugh R., St. Louis
Smith, Ira T., Kansas City
Smith, J. Earl, St. Louis
Smith, James M., Kansas City
Smith, James O., Clinton
Smith, Jason N., Jr., Columbia
Smith, Joe R., Columbia
Smith, John R., St. Louis
Smith, Katherine W., Kansas City
Smith, Kathleen, St. Louis
Smith, Kenneth R., Jr., St. Louis
Smith, Morton E., St. Louis
Smith, Norris W., St. Louis
Smith, Othello D., Prairie Village, Kan. (Member Jackson County Medical Society)
Smith, Robert W., Brookfield
Smith, Roland T., Joplin
Smith, Rollin H., West Plains
Smith, Sidney E., St. Louis
Smith, Ted P., Rolla
Smith, Wallace B., Independence
Smith, William J., Windsor
Smith, W. Russell, Carthage
Smolik, Edmund A., St. Louis
Smoller, Martin B., St. Charles
Smull, Ned W., Kansas City
Snead, William H., Jr., Springfield
Sneid, Philip, Kansas City
Snider, Wilbur R., Independence
Solley, Robert F., Old Saybrook, Conn. (Member St. Louis Medical Society)
Solomon, Felix G., St. Louis
Somers, John E., Columbia
Sommer, Conrad S., St. Louis
Sommer, Ross B., St. Louis
Somoza, Jose, Kansas City
Soorya, Narendir T., St. Louis
Soper, William D., Excelsior Springs
Sopuch, John A., St. Louis
Sosebee, Lee A., Columbia
Soto, Alberto A., St. Louis
Soucy, John C., St. Charles
Soule, Samuel D., Clayton
Spafford, Allen L., Kansas City
Spalding, David L., Springfield
Spalding, Donald G., St. Louis
Spalding, Wilber B., Plattsburg
Spalding, Wilber B., Jr., Kansas City
Sparkman, Thomas C., Cape Girardeau
Spears, Charles A., Branson
Spears, Joe L., Cabool
Spector, Gene W., St. Louis
Spector, Gershon J., St. Louis
Speer, David L., Creve Coeur
Spence, Paul A., Cape Girardeau
Spencer, Donald M., Kansas City
Speno, Angelo A., St. Louis
Spies, Barbara J., Kansas City
Spinzig, Edgar W., Kirkwood
Spitz, Milton A., Chicago, Ill. (Member St. Louis County Medical Society)
Spitz, Richard H., St. Louis
Spoeneman, Marlin C., St. Louis
Spoenemann, Walter H., St. Louis
Sportsman, Weldon L., Kansas City
Spratt, John S., Jr., Columbia
Sprinz, Helmuth, Kansas City
Spurgeon, Milo J., Columbia
Spurney, Joe E., Kansas City
Spurny, Otto M., Kansas City
Squitieri, A. J., St. Louis
Stacey, Wallace R., Independence
Stacy, Winton T., St. Joseph
Staehle, Melvin E., St. Louis
Stafford, Walter R., St. Louis
Staggs, William A., Kansas City
Staley, Harry R., Kansas City
Stallard, Donald J., St. Joseph
Stanfield, Ned M., Jr., St. Louis
Stanley, John H., Kansas City
Stanley, Robert J., St. Louis
Stansbrough, Raymond A., Normandy
Staple, Tom W., St. Louis
Starkloff, Gene B., St. Louis
Starkloff, Max, St. Louis
Statland, Harry, Kansas City
Statland, Morris, Kansas City
Staton, R. Hamilton, Carrollton
Stauffacher, C. Gordon, Sedalia
Stauffer, Harry B., Jefferson City
Steele, Jack T., St. Louis
Steele, James C., Jr., Hannibal
Steffen, Lawrence F., Kansas City
Stegman, Elmer G., Raytown
Stein, Arthur H., Jr., St. Louis
Stein, Harry J., St. Louis
Stein, Joseph W., Kansas City
Stein, Leonard P., St. Louis
Steinbeck, Herbert D., Ridgefield, Conn. (Member Franklin-Gasconade-Warren County Medical Society)
Steinberg, Franz U., St. Louis
Steiner, Alexander J., Clayton
Steinhoff, Neil, Mt. Holly, N. J. (Member St. Louis Medical Society)
Stelle, Charles W., Prairie Village, Kan. (Member Jackson County Medical Society)
Stelmach, Walter J., Kansas City
Stephen, C. Ronald, St. Louis
Stephens, Jack D., Kansas City
Stephens, LeRoy J., St. Louis
Stephens, William A., Chesterfield
Stephenson, Hugh E., Jr., Columbia
Stergen, Nick E., Florissant
Sterkel, Richard L., St. Louis
Sterling, John A., Kirkwood
Stevens, Edward M., St. Joseph
Stevens, Robert W., St. Louis
Stewart, Frances H., St. Louis
Stewart, Harry A., Kansas City
Stewart, John W., St. Louis
Stewart, Robert B., Springfield
Stewart, Robert H., Sedalia
Stewart, R. Wendell, Springfield
Stewart, Wellington B., Columbia
Stewart, Wendell K., Cape Girardeau
Stewart, William J., Columbia
Stickle, Arthur W., St. Louis
Stickler, Ralph O., Kirksville
Stindel, Charles E., St. Louis
Stockton, Raymond W., Kansas City
Stockwell, A. Lloyd, Kansas City
Stockwood, Robert C., Sedalia
Stohr, Paul E., St. Louis
Stokes, James M., St. Louis
Stolar, Jacob, St. Louis
Stoneman, William, III, St. Louis
Stotts, Charles S., Fredonia, Kan. (Member Jackson County Medical Society)
Stoy, Robert P., Columbia
Strader, Richard P., St. Louis
Stratemeier, Edward H., Kansas City
Stratman, Clarence A., N. Kansas City
Straub, David L., Joplin
Strauchen, Gilbert W., Key Largo, Fla. (Member St. Louis County Medical Society)
Strauss, Arthur E., St. Louis
Strauss, Carl F., Kansas City
Streetor, Roderick D., St. Louis (Member Chariton-Macon-Monroe-Randolph County Medical Society)
Strehlman, Benjamin G., Union
Stribling, Thomas L., Independence
Stricker, Emil A., St. James
Stricker, Harold C., Jefferson City
Strobach, Robert L., Butler
Strominger, Donald B., St. Louis
Stronsky, David L., St. Louis
Stroud, Malcolm H., St. Louis
Struessel, Kenneth F., Columbia
Stryker, Garold V., Venice, Fla. (Member St. Louis Medical Society)
Stryker, William I., Ladue
Stuart, Byron M., Boonville
Stuart, Daniel D., Brunswick
Stuart, Wallace, Eureka
Stubblefield, Wayne, Springfield
Stuber, Robert R., St. Joseph
Stuebner, Roland W., Marco Island, Fla. (Member St. Louis County Medical Society)
Stuerman, Lawrence G., Louisiana
Stufflebam, Robert E., Springfield
Sturtevant, Harwood N., Springfield
Stutsman, Albert C., St. Louis
Suba, Antonio R., St. Louis
Suddarth, Sterling B., Kansas City
Sudholt, Alfred F., Jr., St. Ann
Sugar, Robert L., Kansas City
Sugarbaker, Everett D., Jefferson City
Sullivan, Clement J., St. Louis
Sullivan, Wm. Wallace, Kirkwood
Sulzbach, John F., St. Louis
Summers, John B., St. Louis
Summers, Joseph S., Jr., Jefferson City
Summers, Thomas F., St. Louis
Sunderman, Raymond C., St. Louis
Sundstrom, Frank D., Springfield
Sunshine, Herbert, St. Louis
Supattanasiri, Gritte, Ironton
Susanka, William D., St. Louis
Suseela, Dasari, Kansas City
Susman, Irvin C., St. Louis
Susman, Noah, St. Louis
Sutter, Richard A., St. Louis
Sutton, Richard L., Jr., Kansas City
Sutton, Richard N., Columbia
Swaykus, Bernard T., St. Ann
Sweeney, Thomas P., Springfield
Sweet, Herbert C., Webster Groves
Sweiger, James H., Plattsburg
Swerdlow, Martin A., Kansas City
Swidnicki, Leonid, Hannibal
Swisher, Robert C., Walnut Creek, Calif. (Member Jackson County Medical Society)
Switzer, Clyde, Overland Park, Kan. (Member Jackson County Medical Society)
Swope, Joseph A., St. Louis
Sword, Richard O., Kansas City
Sydow, Henry A., Fulton
Szabados, Ernest D., Independence
Szymanski, Stanley R., Macon (Member Grand River Medical Society)

T

Talaban, Raymundo D., Fredericktown (Member St. Louis County Medical Society)
Talbert, Clifford R., Jr., Cape Girardeau
Tamblyn, Claire L., Kansas City
Tanaka, George M., St. Louis
Tanner, Robert H., Jefferson City
Tarrasch, Ernest L., Springfield
Tarson, Solomon S., Overland Park, Kan. (Member Jackson County Medical Society)
Tarver, Quinton, Kennett
Tarvydas, Francis, Edina
Tashma, Sigmund, St. Louis
Tasker, Charles B., Kansas City
Tassi, Albert A., St. Charles
Tatkow, Robert W., St. Louis
Taussig, Barrett L., St. Louis
Taute, Herman, St. Louis
Taylor, D. Dax, Columbia
Taylor, Eugene D., St. Louis
Taylor, Eugene T., St. Louis
Taylor, Helen L., St. Louis
Taylor, Herbert B., St. Louis
Taylor, Leo T., Neosho
Taylor, Leon A., Jefferson City
Taylor, Van W., Bonne Terre
Taylor, William E., Springfield
Teiber, Frederick W., St. Louis
Teitelbaum, Steven L., St. Louis
Tekwani, Hiralal, St. Louis
Temporal, Jose A., St. Louis
Tendai, Mark M., Springfield
Ternberg, Jessie L., St. Louis
Terry, James F., Springfield
Terry, James W., Jr., Cape Girardeau
Tess, Allen F., Florissant
Tess, Melvin J. H., St. Louis
Tesson, James A., Kansas City
Thalblum, Harvey, Kansas City
Thale, Thomas, St. Louis
Thamarappally, Thomas P., Gladstone (Member Jackson County Medical Society)
Tharp, Judith, Platte City
Theel, Otto W., Jr., Kansas City
Theobald, Sterling, Camdenton
Thiel, J. Allen, St. Louis
Thiele, Belmont R., St. Louis
Thiele, George H., Kansas City
Thiele, Otto K., St. Charles
Thierauf, Charles G., St. Louis
Thies, Jerome H., Osceola
Thoma, George E., Jr., St. Louis
Thomas, Christopher Y., Kansas City
Thomas, Fred A., Kansas City
Thomas, Horace E., Columbia
Thomas, Lewis J., Jr., St. Lous
Thomas, Robert M., Columbia
Thomas, Thomas C., Liberty

Thomasson, David D., Springfield
Thompson, Charles L., Kansas City
Thompson, F. Gregg, III, St. Joseph
Thompson, Ian M., Columbia
Thompson, M. Bryant, St. Louis
Thomson, James Myron, Jr., Columbia
Thornton, Fred H., Sikeston
Throgmorton, Howard B., Sikeston
Throne, Bennie J., Kansas City
Throne, Elias M., Kansas City
Thurman, Hill C., Parkville
Thurmann, Manfred, St. Louis
Thym, Henry P., Ballwin
Tice, Wayne K., Independence
Tichenor, Robert W., St. Louis
Tietjen, Frederick O., Jefferson City
Tiffany, Delbert E., Poplar Bluff
Till, Bennie N., Poplar Bluff
Tillema, David A., Kansas City
Tillman, Mary A. T., St. Louis
Tillman, Walter W., Jr., Springfield
Tindall, Robert N., St. Louis
Tinsley, John C., Jr., Columbia
Tiojanco, Milagros E., Kansas City
Tiojanco, Reynaldo, Grandview
Tiongson, Porfirio M., St. Louis
Tippett, Jack C., St. Louis
Tjoflat, Oliver E., St. Louis
Tobias, Norman, St. Louis
Tombridge, Thomas L., Springfield
Tomlinson, William L., St. Louis
Tompson, Robert V., Moberly
Tonelli, George L., St. Louis
°Toon, Thomas J., St. Louis
Torin, Bernice A., University City
Torontow, John, Nevada
Totten, Frederick E., Kansas City
Toubes, Daniel B., Kansas City
Tovar, Manuel, Valdosta, Georgia (Member Buchanan County Medical Society)
Towers, Orville W., St. Charles
Traxel, William Louis, Poplar Bluff
Treiman, Robert C., St. Louis
Tremain, Ernest E., Maplewood
Tremain, Irl G., St. Louis
Trimble, David P., Excelsior Springs
Trimble, George X., Kansas City
Trinidad, Hermanito R., Chillicothe (Member Jefferson County Medical Society)
Triplett, Daniel A., Kansas City
Triska, Roland A., St. Louis
Troeh, Melvin R., Independence
Trotter, Francis O., Jr., St. Louis
Trotter, W. Yates, Springfield
Trowbridge, Barnard C., Kansas City
Trowbridge, Ellsworth H., Jr., Kansas City
Trueblood, Alva C., Jr., St. Louis
Trugly, Edith S., St. Louis
Trunko, Leo, St. Louis
Tsang, John L. K., Springfield
Tsifutis, Argyrios, St. Ann
Tsung, Joseph C., St. Louis
Tucker, Eugene F., St. Louis
Tucker, George L., St. Louis
Tuma, Arthur T., Poplar Bluff
Tumialan, Luis, St. Louis
Tuohy, Gerald F., Kansas City
Turgeon, Ronald P., St. Louis
Turner, C. M., St. Louis
Turner, Glenn O., Springfield
Turner, James H., Poplar Bluff
Turner, James K., Clayton
Turner, Kirby L., Potosi
Turner, Ronald M., Independence
Turner, Rush, St. Louis
Turner, William F., Poplar Bluff
Tutera, Dominic F., Kansas City
Tuthill, Herbert, Kansas City
Tuttle, Jay F., Farmington (Member Callaway County Medical Society)
Twedell, Donald L., St. Louis
Twin, Edward J., Kansas City
Twyman, Richard A., Kansas City
Tygett, Glenn J., Cape Girardeau
Tygett, Joseph N., Cape Girardeau

U

Uhlemeyer, Henry A., St. Louis
Ulett, George A., St. Louis
Ulett, Pearl C., St. Louis
Umali, Emil C., St. Louis
Underwood, Dick H., Kansas City
Underwood, Johnson, Jr., Kansas City
Unger, Harold, Kansas City
Ungvari, Joseph C., St. Louis
Upsher, Albert E., Kansas City
Urban, Edgar D., Sikeston
Utley, James H., St. Louis
Utterman, William F., Perryville

V

Vacca, Joseph B., St. Louis
Vafi, Houshang, St. Charles
Vajaranant, Manit, Lexington
Valach, Frank J., St. Louis
Valdes, Orestes S., Chesterfield
Valins, Eugene, Kansas City
Valtierra, Cesar A., St. Louis
Van Biber, James T., Independence
Van Buskirk, Terrance E., Kansas City
Van Buskirk, William C., Kansas City
Van Dervoort, Robert L., Jr., Columbia
Vandiver, Virgil D., Chillicothe
Vandover, John T., St. Louis
Van Dyke, Elmer H., Sedalia
VanGoidsenhoven, Guy, St. Louis
Van Matre, R. M., Washington, D. C. (Member St. Louis Medical Society)
Van Norman, Robert T., St. Louis
Van Peenen, Hubert J., Columbia
Van Thullenar, Philip A., Kansas City
Van Vranken, Eugene E., Jefferson City
Vargas, Teodoro C., Manchester
Varma, D. K., Poplar Bluff
Vart, Gary R., St. Charles
Vatterott, Paul B., St. Louis
Vaughan, J. Russell, St. Louis
Vaughan, Robert W., St. Louis
Vaughn, Arthur N., St. Louis
Vaughn, James W., Kansas City
Velasco, Ernest, St. Louis
Veluz, Benito I., St. Louis
Vensel, Lee H., Springfield
Ventus, Manuel A., Chesterfield
Vera, Enrique, Kansas City
Verda, Dominic J., St. Louis
Verde, Julian N., St. Louis
Vermeire, David A., Kansas City
Verzola, Eufemio, St. Louis
Vescovo, Paul C., Jr., Kansas City
Viamontes, Jorge A., St. Louis
Vianzon, Elizabeth, Florissant
Vidals, Victor G., Kansas City
Viers, Wayne A., St. Louis
Vijungco, Herminia D., St. Louis
Vilar, Pio M., Jr., Bridgeton
Villadiego, Virgilio, St. Louis
Villahermosa, Juanito L., Savannah
Villamar, Elizabeth N., Hazelwood
Villanueva, Angela A., St. Louis
Villanueva, Cesar, St. Charles
Villarama, Antonio P., Ballwin
Villarama, Lilia F., St. Louis
Vilmer, Charles, N. Kansas City
Viloria, Alberto B., St. Louis
Vincent, Jack C., Kansas City
Vinson, Harold A., Joplin
Vinyard, Jack L., Joplin (Member Grand River Medical Society)
Viraghaty, Julius G., Glencoe
Virant, John A., St. Louis
Virden, Herbert, Kansas City
Viril, Leonardo C., Kansas City
Vitale, Anthony J., St. Louis
Vitale, Nicholas S., St. Louis
Vitt, Alvin E., St. Louis
Vitt, Edwin F., St. Louis
Viviano, Joseph G., St. Louis
Vogel, Arthur P., Kansas City
Volk, George E., Kansas City
Vollmar, Clarence J., Webster Groves
Votaw, Robert E., St. Louis
Voth, Harold W., Kansas City
Vournas, Christopher G., St. Louis

W

Wachtel, Thomas L., Corbin, Ky. (Member St. Louis Medical Society)
Wacker, Leo L., St. Louis
Waddell, Kenneth E., Springfield
Waddle, Theodore L., Dexter
Wade, Frederick E., Kansas City
Wade, James P., St. Louis
Wadlow, Ernest E., St. Joseph
Waggoner, Charles M., Columbia
Waggoner, Sharon E., St. Joseph
Wagner, John R., St. Louis
Wagner, Paul J., Kansas City
Wakefield, Franklin H., Sun City, Ariz. (Member Jackson County Medical Society)
Wakeman, Jasper N., Springfield
Wakeman, Jasper Newton, Jr., Springfield
Wakerlin, G. E., Columbia
Wald, Donald M., North Kansas City
Wald, Stanley M., St. Louis
Walker, Ambrose T., Mammoth Springs, Ark. (Member South Central Counties Medical Society)
Walker, Francis S., St. Louis
Walker, Harvey, Jr., St. Louis
Walker, J. Leslie, St. Louis
Walker, James C., Kansas City
Walker, John W., Kansas City
Walker, Orville C., Jr., Independence
Walker, Paul W., Joplin
Walker, Willard B., Clayton
Walker, William M., Springfield
Wall, Harry C., Kansas City
Wall, Joe A., Houston
Wall, Leonard A., Kansas City
Wall, Lester E., St. Louis
Wallace, Edgar S., Mexico
Wallace, Hilen K., St. Joseph
Wallace, John K., II, Jefferson City
Wallwork, J. Caleb, Ballwin
Walsh, James W., St. Louis
Walter, Archie L., Sedalia
Walter, Kenneth E., St. Louis
Walter, William L., St. Louis
Walters, Harold E., St. Louis
Walters, Henry W., St. Louis
Walters, John H., Columbia
Walters, Laura, Columbia
Walters, William H., St. Louis
Walterscheid, John H., Hannibal
Walther, Roy A., Jr., St. Louis
Waltman, Stephen, St. Louis
Walton, Franklin E., St. Louis
Waltrip, Roy T., Jr., Sikeston
Waltz, Charles A., Kansas City
Waltz, James R., Kansas City
Wanamaker, John M., Rock Port
°Wang, George Y. M., Kansas City
Ward, Joe, Lexington
Ward, Robert L., St. Louis
Warren, James C., St. Louis
Warres, Herbert L., Springfield
Washburn, J. Loren, Versailles
Washington, Edward L., Columbia
Washington, Walter, St. Louis
Wasserman, Helman C., St. Louis
Waterfield, Jim R., Springfield
Waterman, Franklin M., Liberty
Waters, Hugh R., St. Louis
Wathanacharoen, Suchint, Kansas City
Watkins, George L., Jr., Farmington
Watson, Cecil L., Marshall
Watson, Ethel, Independence
Watson, Trevor F., Columbia
Wattenberg, Carl A., St. Louis
Watts, Byron E., Jefferson City
Waxelman, Roger J., Manchester
Waxman, Herbert J., Kansas City
Waxman, Jane Z., Kansas City
Wayland, Thomas A., Camdenton
Wayne, Sherwyn J., St. Louis
Webb, Harry E., Kansas City
Webb, Leslie R., Jr., Springfield
Webb, Marion A., St. Louis
Webb, Paul B., St. Louis
Webb, Paul B., Jr., St. Louis
Webb, Paul K., St. Louis
Webber, Wm. B., St. Louis
Weber, J. R., St. Louis
Weber, Sol, St. Louis
Wee, George C., Ellisville
Weed, Randal W., St. Joseph
Weeks, George R., Cape Girardeau
Weeks, Paul M., St. Louis
Weidmaier, Edward J., Kansas City
Weiford, Edward C., Kansas City
Weiler, Thomas J., St. Louis
Weinand, Ernest E., St. Joseph
Weinhaus, Robert S., St. Louis
Weir, Don C., St. Louis
Weir, Robert K., Kansas City
Weir, Royal A., St. Louis
Weis, Matthew W., Villa Ridge
Weisman, Renate D., St. Ann
Weisman, Sol, St. Louis
Weiss, James M. A., Columbia
Weiss, Stuart, St. Louis
Weldon, Clarence S., St. Louis
Well, Julius W., Palmyra
Weller, Lynn D., Kansas City
Wells, Donald E., Kansas City
Wells, James A., Kansas City
Wells, John H., Kansas City
Welner, Amos, St. Louis
Welsh, Laurence C., St. Louis
Wempe, G. Raymond, Maryville
Wenneker, Alvin S., St. Louis
Wenner, Herbert A., Kansas City
Wentzel, Louis R., St. Louis
Werner, Dean F., N. Kansas City
Werner, Franklin C., Kansas City
Werner, William A., St. Louis
Werth, Joseph, Jefferson City
Wessler, Stanford, St. Louis
West, Joseph W., St. Louis
Westerfeld, Roy A., St. Charles
Westerman, Henry C., St. Louis
Westerman, Robert N., St. Louis
Westrup, Ellsworth A., Webster Groves
Westura, Edwin E., St. Louis
Wetzel, Gus S., Clinton

° Doctor of Osteopathy.

Weyerich, Leon F., St. Louis
Weyerich, Noel F., Chesterfield
Weygandt, Glenn R., St. Louis
Wheeler, Charles B., Kansas City
Wheeler, John H., Kansas City
Wheeler, Paul C., Columbia
Wheeler, Robert L., Harrisonville
Whitaker. Topsy H., East Prairie
White, Barry B., Poplar Bluff
White, Charles H., Kansas City
White, Eugene F., Rolla
White, George A., Kansas City
White, James S., Kansas City
White, Newton B., St. Louis
White, R. Ned., Springfield
White, Stoughton F., Kansas City
White, William E., Kansas City
White, William H., Jr., St. Louis
Whiteman, John R., Kansas City
Whitener, Miles C., St. Louis
Whitener, Paul R., St. Ann
Whitlock, C. Courtney, Springfield
Whitman, Doyle C., Shawnee Mission, Kan. (Member Jackson County Medical Society)
Whitmore, J. Stewart, Kansas City
Whitsell, Ora E., St. Joseph
Whittaker, Charles K., Kansas City
Whitten, John S., Independence
Whitten, Marion F., Carthage
Whittico, James M., St. Louis
Wicks, Edwin O., Kansas City
Wiedershine, Leonard J., St. Louis
Wiegand, Herbert C., St. Louis
Wieman, Harry K., Joplin
Wien, Irving A., Kansas City
Wiggins, Roland L., Columbia
Wilber, Robert D., Kansas City
Wilbers, Raymond H., Mexico
Wilbois, Ronald P., St. Louis
Wilcox, Ruth E., Joplin
Wilcoxen, William B., Bowling Green
Wiles, Jack N., West Plains
Wilhelm, Warren F., Kansas City
Wilkinson, Charles B., Kansas City
Wilkinson, Everett A., Kansas City
Willcoxon, Robert L., Joplin
Williams, Carol F., St. Louis
Williams, Frank R., Kansas City
Williams, George P., Kansas City
Williams, Jerome, St. Louis
Williams, John M., Liberty
Williams, John W., Oak Grove
Williams, John W., Springfield
Williams, John W., Jr., Springfield
Williams, Joseph C., Jr., Kansas City
Williams, Ray D., St. Louis
Williams, Robert D., Kansas City
Williams, Robert S., Mexico
Williams, Roland D., Kansas City
Williams, Starks J., Kansas City
Williams, Thomas A., Leawood, Kan. (Member Clay County Medical Society)
Williams, W. A., Jr., Cape Girardeau
Williamson, George L., N. Kansas City
Williamson, Walter E., St. Louis
Willits, Lyle G., Kansas City
Willman, Charles R., St. Joseph
Willman, Vallee L., St. Louis
Willoughby, James W., Kansas City
Willoughby, Jean B., Kansas City
Willumsen, Henry C., St. Joseph
[°]Wilson, A. W., St. Louis
Wilson, Alice H., Joplin
Wilson, Charles F., Cape Girardeau
Wilson, Clifford C., Kansas City
Wilson, Fred K., Winston
Wilson, George P., Columbia
Wilson, Hugh M., St. Louis
Wilson, John E., Columbia
Wilson, Keith S., St. Louis
Wilson, Loys C., Kennett
Wilson, Roy E., Springfield
Wilson, Susan L., St. Louis
Wilson, Vernon E., Columbia
Wilucki, Melvin R., St. Louis
Wimmer, Warren J., St. Louis
Windmiller, Myrl E., Columbia
Windsor, Charles E., St. Louis
Windsor, David G., Rosendale (Member Buchanan County Medical Society)
Winegar, Alvon C., Jefferson City
Winer, Herbert J., Kansas City
Winer, Nathaniel, Kansas City
Winkelman, Esther B., Kansas City
Winn, George W., Boonville
Winsky, Arlen D., Springfield
Winston, Bernard H., Kansas City
Winter, John H., St. Louis
Winter, Tyrus D., St. Louis
Winterer, Roland A., St. Louis
Winters, Kathleen, St. Louis
Wipfler, Earl J., Jr., St. Charles
Wirthlin, Edward H., St. Louis
Wise, George W., Kansas City
Wise, Gordon F., Springfield
Wise, Leslie, St. Louis
Wise, Morris F., Kansas City
Wissmath, Frank S., Clayton
Wissner, Seth, St. Louis
Withers, Orval R., Kansas City
Withrow, John B., N. Kansas City (Member Clay County Medical Society)
Witt, Clyde M., St. Louis
Witt, Frederick W., St. Louis
Wittgen, Edward M., St. Louis
Wittler, Harry A., St. Louis
Wittmer, Samuel C., Springfield
Witzleben, Camillus L., St. Louis
Wochner, R. Dean, St. Louis
Woehl, Joseph J., Kansas City
Wolcott, Lester E., Lubbock, Tex. (Member Boone County Medical Society)
Wolf, David I., St. Louis
Wolf, Jack W., Kansas City
Wolfe, Edward, St. Louis
Wolff, Dolores P., St. Louis
Wolff, Gerald, St. Louis
Wolff, Harold D., St. Louis
Wolff, Paul G., Cape Girardeau
Wolff, Ray J., St. Ann
Wolfgram, Edwin D., St. Louis
Wolfram, Philip H., Platte City
Womack, Granville J., Maryland Heights
Wommack, Fred L., Crane
Wong, George, Jr., Springfield
Wood, Bennett R., St. Louis
Wood, George F., Fulton
Wood, George H., Carthage
Wood, James A., Clayton
Wood, Tom, Poplar Bluff
Wood, William W., West Plains
Woodman, Grey M., Kansas City
Woodruff, Calvin W., Columbia
Woodruff, Robert A., Jr., St. Louis
Woodruff, Sharon, Washington (Member St. Louis County Medical Society)
Woods, Harold V., Blue Springs
Woods, John F., Advance
Woods, Ralph E., Clayton
Woods, S. Dwight, Kansas City
Woods, Walton C., Kansas City
Woodward, William W., Kansas City
Wool, Gerald, St. Louis
Wooldridge, Bart F., Joplin
Wooldridge, Wilfred E., Springfield
Woolsey, Joyce E., St. Louis
Woolsey, Robert M., St. Louis
Word, Parker H., St. Louis
Workman, Charles E., N. Kansas City (Member Clay County Medical Society)
Workman, George M., Hermann
Worley, Charles A., Sweet Springs
Wortmann, Robert F., Kansas City
Wotawa, William J., St. Louis
Wray, Rolla B., Nevada
Wray, R. C., Jr., St. Louis
Wright, Earl J., Kansas City
Wright, Robert P., Kansas City
Wu, Shuh-Min, Kansas City
Wu, William Q., Kansas City
Wulff, George J. L., Jr., St. Louis
Wurr, Dieter, Arnold
Wurster, Jerry B., Kansas City
Wurster, W. Joel, Kansas City
Wyatt, Lois C., Kirkwood
Wyrsch, Leo M., Jr., Springfield

Y

Yaeger, Gerald A., St. Charles
Yalcin, Enver, St. Louis
Yancey, Daniel L., Springfield
Yang, Jae H., St. Louis
Yannakakis, John E., Florissant
Yanow, Mitchell, St. Louis
Yap, Mardonio J. R., St. Louis
Yazdi, A. M., St. Louis
Ylagan, Amando, Jr., St. Louis
Yoon, Jin Soo, Chillicothe
Yore, Richard W., St. Louis
Yoskit, Harry, Festus
Youll, Donald V., Kansas City
Youmans, Ronald A., Kansas City
Young, Calvin C., Jr., Joplin
Young, James E., Kansas City
Young, Jesse W., Kansas City, Kansas (Member Jackson County Medical Society)
Young, Paul R., Columbia
Young, Robert B., Rolla
Young, Robert H., Moberly
Youngblood, James P., Kansas City
Younge, Walter A., Lovejoy, Ill. (Member St. Louis Medical Society)
Younger, Anita, St. Louis
Younger, Ernest, St. Louis

Z

Zacharias, David L., Kansas City
Zahn, Robert L., Springfield
Zahony, Ivan. Kansas City
Zahorsky, Carroll L., Kansas City
Zahorsky, Theodore S., St. Louis
Zeffren, Joel L., St. Louis
Zeigler, Joseph M., Creve Coeur
Zekert, Horst, St. Louis
Zellermayer, Jacob, Shawnee Mission, Kan. (Member Jackson County Medical Society)
Ziegelmeyer, John S., St. Louis
Ziegler, Anthony, Jr., Vandalia
Zimmerman, Herbert B., St. Louis
Zimmerman, Joseph A., Kennett
Zingale, Frank G., St. Louis
Zink, Oscar C., St. Louis
Zivnuska, Fred R., St. Louis
Zografakis, George H., St. Louis
Zoller, David D., Kansas City
Zuckner, Jack, St. Louis
Zukowski, Edward T., Chesterfield
Zwart, Claude H., St. Louis
Zwerenz, Bruno H., Kansas City
Zwirn, Benjamin H., St. Louis

[°] Doctor of Osteopathy.

Roster of Members by County Societies

(See Instructions on Page 515)

ADAIR COUNTY
(North Central Counties Medical Society)

ANDREW COUNTY MEDICAL SOCIETY
(Savannah 64485)

Baker, Warren C., Savannah
Kelley, Gilbert B., Savannah
Villahermosa, Juanito L., Savannah

ATCHISON COUNTY
(Northwest Missouri Medical Society)

AUDRAIN COUNTY MEDICAL SOCIETY
(Mexico 65265)

Boyce, John M., 620 E. Monroe St.
Bradley, William W., Box 47, Centralia 65240
Cottey, John H., 217 E. Jackson
Daut, Donald W., 200 East Monroe
Davis, Leonard L., Jr., #5 Melody Lane
Dwyer, Thomas L., 119 E. Love St.
Ector, Henry J., 521 E. Breckenridge
Ekern, H. Peter, 1415 S. Morris St.
Garcia, Charles L., Mexico
Huq, Md. Nasrul, 212 E. Monroe
Jolly, Benjamin N., 112 N. Clark Ave.
Jolly, William H., 112 N. Clark Ave.
Kallenbach, Glen P., P. O. Box 249
Lankford, Harold D., 117 E. Monroe St.
O'Brien, Harry F., Mexico
Rodes, Ned D., Mexico
Wallace, Edgar S., P. O. Box 471
Wilbers, Raymond H., 113 E. Monroe
Williams, Robert S., P. O. Box 147
Ziegler, Anthony, Jr., Vandalia 63382

BARRY COUNTY
(Ozarks Medical Society)

BARTON COUNTY MEDICAL SOCIETY
(Lamar 64759)

Arnold, Herbert M., Lamar
Bickel, Vern T., Lamar
Cain, Alvin R., Lamar
Carroll, Thomas W., P.O. Box 368, Lamar
Gouldner, Edmond, 1103 Broadway, Lamar

BATES COUNTY
(West Central Missouri Medical Society)

BOLLINGER COUNTY
(Mineral Area Medical Society)

BOONE COUNTY MEDICAL SOCIETY
(Columbia 65201)

Adams, Harold D., 213 W. Broadway
Allen, Joseph E., 5813 St. Charles Rd.
Allen, Robert W., 4900 St. Charles Rd.
Allen, William C., 508 W. Briarwood Lane
Almond, Carl H., 807 Stadium Rd.
Amlinger, Philipp R., 1118 W. Rollins Rd.
Anderson, Ivan A., 606 Medavista
Anderson, Philip C., 807 Stadium Rd.
Anderson, Thomas R., 822 Yale St.
Arnold, Richard C., P. O. Box 53
Asel, Norman D., 1502 E. Broadway
Baker, A. Sherwood, 807 Stadium Rd.
Baker, James M., 16 S. 10th St.
Barbee, Charles W., 113 W. Broadway
Bazzoui, Widad, 901 Colgate
Beene, Thomas K., 2806 W. Rollins Rd.
Bingham, Hal G., 807 Stadium Rd.
Black, Samuel P. W., 300 S. Glenwood St.
Blackwell, Charles W., 201 W. Broadway
Bourgeois, Curtis, Univ. of Mo. Medical Center
Brooke, Clement E., 901 Edgewood Ave.
Brukardt, Diane, Student Health Service
Bruner, Claude R., 909 University Ave.
Bumgarner, James E., 1504 E. Broadway
Bumgarner, Roger W., P. O. Box 975
Burns, Thomas W., 310 E. Brandon Rd.
Busby, William E., 917-A Leslie, Jefferson City 65101
Bynum, William R., P. O. Box 998
Carnahan, Charles E., 3801 Cedar Lane
Cartwright, Robert S., 605 Hulen Dr.
Chalkley, Judson I., Boone County Hosp.
Chapman, Charles L., 1916 Ridgemont
Cheek, Charles W., 113 W. Broadway
Chiasson, E. Chaille, P. O. Box 1077
Cochran, Donald Q., 1502 E. Broadway
Colwill, Jack M., Countryshire, R.F.D. 5
Cooper, Maurice E., 1000 Wayne Rd.
Cope, James C., 1502 E. Broadway
Craft, George A., 203 Stadium Rd.
Crowley, Wm. J., Jr., 11 S. Williams
Culley, Thomas S., 807 Stadium Rd.
Darnell, Thomas F. B., Doctors Clinic Bldg.
Davis, David, 801 Crestland Ave.
Dawson, Richard, 1226 N. Shartel, Oklahoma City, Oklahoma 73103
Denninghoff, James C., 201 W. Broadway
DeWeese, Marion S., 807 Stadium Rd.
Dexheimer, Frank R., 401 Keene
Dexter, James D., 807 Stadium Rd.
Donegan, Judith H., University of Missouri Medical Center
Donegan, William L., Ellis Fischel Cancer Hosp.
Dyer, Gary A., 807 Stadium Rd.
Eggers, George W. N., Jr., 807 Stadium Rd.
Ferneau, James E., 113 W. Broadway
Foote, Jerry E., 1504 E. Broadway
Frazier, Robert Edward, 803 Stadium
Frueh, Bartley R., 108 Park Hill Ave.
Fuchs, George J., Jr., 1504 E. Broadway
Galeota, William R., 807 Stadium Rd.
Gammel, George E., Boone County Hospital Laboratory
Garrett, Glen H., 909 University Ave.
Garrotto, Lewis J., 807 Stadium Rd.
Gaunt, William D., 807 Stadium Rd.
Griffin, William T., 807 Stadium Rd.
Guthrie, Richard A., University of Missouri Medical Center
Hall, David G., 807 Stadium Rd.
Hardwicke, Henry M., Ashland 65010
Harris, Hugh S., Jr., 801 Cowan Dr.
Harris, Robert J., 2505 E. Broadway
Harrison, Winston E., 201 W. Broadway
Hart, William M., 807 Stadium Rd.
Haw, Marvin T., Jr., 1807 Jackson
Hickcox, John P., 1504 E. Broadway
Hopeman, Alan R., 9967 E. Ida, Englewood, Colo. 80110
Hori, Jose M., Ellis Fischel State Cancer Hospital
Hubbell, Ira G., 302 McNab Dr.
Hueser, James N., 604 W. Broadway
Ide, Carl H., 600 Laurel Dr.
Jackson, Robert L., 807 Stadium Rd.
James, Elizabeth J. P., 807 Stadium Rd.
James, Ronald C., 807 Stadium Rd.
Johnsgard, Larry S., 807 Stadium Rd.
Johnson, Richard E., Boone County Hosp.
Jones, John B., 1700 Stonehill
Joseph, Donald J., 807 Stadium Rd.
Kays, Kenneth, 807 Stadium Rd.
Keown, Kenneth K., 807 Stadium Rd.
Kerr, S. Earl, 1308 Fieldcrest
Kim, Tchang Man, 807 Stadium Rd.
King, Robert J., 1502 E. Broadway
Knutson, Carl O., Ellis Fischel State Cancer Hospital
Kubin, Milford T., 1101 Nefong Blvd.
LaChance, Leopold, 110 W. Sneed, Centralia 65240
Ladenson, Roland P., 16 S. 10th St.
Landhuis, L. R., 113 W. Broadway
Lee, Yeu-Tsu, VA Hospital, Sepulveda, Calif. 91343
Leech, Charles A., 1504 E. Broadway
Leeper, Sidlee W., 1504 E. Broadway
Lehr, James L., 807 Stadium Rd.
Lewis, Ray B., Rt. #1, Rocheport 65279
Lindberg, Donald, Route 4
Litwiller, R. W., 1312 W. Broadway
Lodwick, Gwilym S., 402 Williamsburg on the Green
Logue, John T., 1504 E. Broadway
Lohmar, Roland E., 113 W. Broadway
Lucas, Fred V., 807 Stadium Rd.
Lukens, John N., Jr., 171 Harrison Ave., Boston, Mass. 02111
McCord, E. Scott, 807 Stadium Rd.
McElroy, Glenn L., 1504 E. Broadway
Marco, Philip J., 1015 College Park
Marienfeld, Carl J., 807 Stadium Rd.
Mayer, William D., 1 Ridgeley Rd.
Metzgar, Marshall T., 807 Stadium Rd.
Miller, Leroy J., 1502 E. Broadway
Millikan, Larry E., 807 Stadium Rd.
Mitchell, Franklin L., 2208 Danforth Ct.
Mitchell, Lynn D., Box U
Monroe, C. Dean, 803 Stadium Rd.
Moranville, Benedict A., 1504 E. Broadway
Morgan, Philip E., Missouri Regional Medical Program, Lewis Hall
Mosby, Larry D., 107 E. Brandon Rd.
Mullins, Maurice F., 217 W. Broadway
Neal, M. Pinson, 807 Stadium Rd.
Nieuwenhuizen, Maarten, 803 Stadium Rd.
Nolph, Georgia B., 801 Westport Dr.
Oestreich, Alan, N217 University Medical Center
Orth, Oliver G., 11 S. Williams
Overholser, Milton D., 807 Stadium Rd.
Payne, David E., 1901 Ridgemont
Payne, John W., 1504 E. Broadway
Pearman, Carl C., 1021 Queen Ann Dr. #2
Perez-Mesa, Carlos, Ellis Fischel State Cancer Hosp.
Peterson, Vernon J., 807 Stadium
Pfefer, Leland U., 1504 E. Broadway
Pickard, Clarence M., 113 W. Broadway
Pickens, James Milton, 807 Stadium
Pingelton, William B., 113 W. Broadway
Politi, Gregory B., P.O. Box 975
Politte, Lenard L., 113 W. Broadway
Pugh, Reginald P., Ellis Fischel Hospital
Rall, Kenneth L., 1121 Danforth Dr.
Reddin, Patrick C., 807 Stadium Rd.
Ridenhour, C. E. Gene, Rt. 1, Cedar Grove Estates
Rikli, Arthur E., 4003 Faurot
Rink, Richard A., 807 Stadium Rd.
Robinson, Robert R., Jr., 2917 W. Rollins Rd.
Rodgers, Elrie P., Box 993
Rosenholtz, Mitchell J., 807 Stadium Rd.
Rosenstein, Daniel Lesem, 807 Stadium Rd.
Ross, Gilbert, Jr., 807 Stadium Rd.
Russell, Garth, 1504 E. Broadway
Scheuber, Charles, 1504 E. Broadway
Schewe, Elmer J., Jr., 1232 Sunset Dr.
Scott, Kenneth F., Jr., Navy Regional Medical Center, Camp Pendleton, Calif. 92055
See, William B., 1504 E. Broadway
Senhauser, Donald A., 807 Stadium Rd.
Shipley, William A., 807 Stadium Rd.
Shively, John A., 807 Stadium Rd.
Sights, Warren P., Jr., 807 Stadium Rd.
Simmons, Earl M., Jr., 2216 Ridgefield Dr.
Smith, Jason N., Jr., 701 West Blvd. S.
Smith, Joe R., 1506 E. Broadway
Somers, John E., 11 S. Williams
Sosebee, Lee A., 1504 E. Broadway
Spratt, John S., Jr., 105 S. Glenwood Ave.
Spurgeon, Milo J., 404 Edgewood Ave.
Stephenson, Hugh E., Jr., 807 Stadium Rd.
Stewart, Wellington B., Medical Computer Center, 307 Lewis Hall
Stewart, William J., 909 University Ave.
Stoy, Robert P., 201 W. Broadway
Struessel, Kenneth F., 214 Eastgate Bldg.
Sutton, Richard N., 1806 Highridge Dr.
Taylor, D. Dax, 807 Stadium Rd.
Thomas, Horace E., 1504 E. Broadway
Thomas, Robert M., 113 W. Broadway
Thompson, Ian M., 807 Stadium Rd.
Thomson, James Myron, Jr., Ellis Fischel State Cancer Hospital
Tinsley, John C., Jr., 16 S. Tenth St.
Van Dervoort, Robert L., Jr., 201 W. Broadway
VanPeenen, Hubert J., 807 Stadium Rd.
Waggoner, Charles M., 201 W. Broadway
Wakerlin, G. E., 406 Turner Ave.
Walters, John H., 11 S. Williams St.
Walters, Laura, 11 S. Williams St.
Washington, Edward L., 1504 E. Broadway
Watson, Trevor F., 1504 E. Broadway
Weiss, James M. A., 807 Stadium Rd.
Wheeler, Paul C., Univ. of Mo. Med. Center
Wiggins, Roland L., 408 N. Garth
Wilson, George P., 201 W. Broadway
Wilson, John E., 401 Keene St.
Wilson, Vernon E., University of Missouri Medical Center
Windmiller, Myrl E., 1504 E. Broadway
Wolcott, Lester E., 4609 11th St., Lubbock, Texas 79416
Woodruff. Calvin W., 807 Stadium Rd.
Young, Paul R., University of Missouri School of Medicine

BUCHANAN COUNTY MEDICAL SOCIETY
(St. Joseph)

Acuff, R. Philip, 702 Jule St. 64501
Ahad, Abdul, 3400 Frederick Ave. 64502
Ames, Mary B., 2318 Lovers La. 64505
Ames, William H., 902 Edmond St. 64501
Andres, Edward H., 902 Edmond 64501
Augustine, Robert W., 29322 Lancaster Dr., Southfield, Mich. 48076
Bartulica, Nicholas, 422 N. 7th 64501
Beck, Paul M., Kirkpatrick Bldg. 64501
Beheler, Edward M., 422 N. 7th St. 64501
Benson, Scott C., 324 N. 6th St. 64501
Berney, Francis J., Kirkpatrick Bldg. 64501
Bristow, Robert B., 1302 Faraon 64501

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[*] Doctor of Osteopathy.

Bryant, Sydney L., 902 Edmond St. 64501
Butler, Elza F., 902 Edmond St. 64501
Callman, George, State Hosp. No. 2 64502
Carpenter, George T., 902 Edmond St. 64501
Challener, William A., III, 902 Edmond 64501
Christ, Martin H., 1402 Faraon 64501
Cox, John P., 902 Edmond St. 64501
Craig, Owen W. D., Kirkpatrick Bldg. 64501
Craig, Richard O., 320 Pioneer Bldg. 64501
Day, Maxwell, 1410 Highland, McAllen, Tex. 78501
Decanini, Mario, P. O. Box 11 64502
DuMont, Clement C., 1905 Francis St. 64501
Ferguson, Luther J., 2907 Francis St. 64501
Fischer, Martin J., 902 Edmond, 64501
Fisher, Joseph L., 7th & Jule Sts. 64501
Forgrave, Leon P., 1 Hundley Dr. 64506
Forman, George W., P.O. Box 830 64502
Fox, Gerald E., Methodist Hospital, 8th & Faraon 64501
Fuson, Levi H., Route 3 64506
Garrison, David L., 902 Edmond 64502
Grant, Claude S., 1302 Faraon St. 64501
Greenberg, Charles, 10669 Rochester Ave., Los Angeles, Calif. 90024
Grimes, Manning E., Kirkpatrick Bldg. 64501
Grinstein, Alberto, 3010 Frederick 64501
Gunter, Joe S., 902 Edmond St. 64501
Handler, Eric, Physicians and Surgeons Bldg. 64501
Harner, Casper G., 902 Edmond St. 64501
Hayes, Paul W., 902 Edmond St. 64501
Herman, Allen I., Physicians and Surgeons Bldg. 64501
Howden, Thomas L., 2723 Francis 64501
Hugbes, Judson M., 3306 Jennifer La. 64506
Ide, Lucien W., P. O. Box 830 64502
Jimenez, Jose, 1004 Rush Road 64502
Kieber, Robert W., Kirkpatrick Bldg. 64501
Kline, Carlyn M., 17 Stonecrest St. 64506
Kline, Edmund W., 510 Francis St. 64501
Knepper, Paul A., 902 Edmond St. 64501
Kulowski, Jacob, 2404 Highly St. 64506
Lee, Carleton H., 2716 Douglas 64506
Lehman, Philip C., 510 Francis St. 64501
McDaniel, John R., 902 Edmond St. 64501
McDonald, Wallace, 305 N. 8th 64501
McDonald, Wilbur P., 301 N. 8th St. 64501
Maginn, Richard L., 702 Jule St. 64501
Marston, F. James, Jr., 902 Edmond St. 64501
Martin, John N., 1302 Faraon 64501
Minton, Robert S., Forest City 64451
Moen, Berwyn H., 902 Edmond St. 64501
Morse, John P., 902 Edmond St. 64501
Morse, Marvin, 2702 Faraon St. 64501
Mothershead, John L., 2603 Frederick Ave. 64501
Muench, Albert H., 620 Francis 64501
Mullinax, Orr, Robidoux Motor Hotel 64501
Mundy, Homer F., Robidoux Hotel, 5th & Francis 64501
Ness, Carl K., 902 Edmond St. 64501
O'Brien, Liam, State Hospital No. 2 64502
O'Connor, William B., 510 Francis St. 64501
Pak, Y. S., Box 263 64502
Paulson, Gordon S., 510 Francis 64501
Petersen, Harold E., 2401 Frederick Ave. 64501
Pfeffer, Robert I., 1915 N. 29th St. 64506
Pifer, Lawrence H., 1302 Faraon St. 64501
Potter, Caryl A., Jr., Pioneer Bldg. 64501
Prokop, Joseph R., 902 Edmond St., 64501
Raphel, Jose, 37 Northridge Dr. 64506
Redmond, William, Corby Bldg. 64501
Riddell, Richard V., 902 Edmond St. 64501
Roberts, Phyllis Grant, 3314 Linda La. 64506
Rogers, John T., 2502 Asbland Ave. 64506
Rosenthal, Irwin I., State Hospital No. 2 64502
Rost, William B., 2221 N.W. Extension Blvd. 64506
Ryan, John H., 432 Kirkpatrick Bldg. 64501
Sanchez, Salvador Valera, 3400 Frederick 64506
Senne, Herbert C., 223 N. 7th St. 64501
Senor, Samuel E., 722½ Francis 64501
Shevlin, Charles F., 902 Edmond St. 64501
Sklenar, Donald E., 228 Illinois Ave. 64504
Stacy, Winton T., 1215 N. 24th St., 64506
Stallard, Donald J., 902 Edmond St. 64501
Stevens, Edward M., 702 Jule St. 64501
Stuber, Robert R., 2614 Buehler Ave. 64501
Thompson, F. Gregg, III, 2714 Ashland Ave. 64506
Tovar, Manuel, 2311 N. Patterson, Valdosta, Ga. 31601
Wadlow, Ernest E., 510 Francis St. 64501
Waggoner, Sharon E., 301 Illinois Ave. 64504
Wallace, Hilen K., 5th and Francis St. 64501
Weed, Randal W., 702 Jule St. 64501
Weinand, Ernest E., 902 Edmond St. 64501
Whitsell, Ora E., 802 N. 23rd St. 64506
Willman, Charles R., 2405 Frederick Ave. 64501
Willumsen, Henry C., 902 Edmond St. 64501
Windsor, David G., Rt. 1, Rosendale 64483

BUTLER-WAYNE-RIPLEY COUNTY MEDICAL SOCIETY
(Poplar Bluff 63901)

Barbour, Marvin R., Kneibert Clinic
Beecher, Sheldon B., 1517 Rosedale Ave.
Biggs, Fred J., Jr., Kneibert Clinic
Brookreson, Alton D., 1500 Lurlyn
Brookreson, Alton F., 217 Oak St.
Caldwell, Fred, Kneibert Clinic
Camp, Richard V., Jr., Rt. 2, Box 23-A
Canlas, Emilio M., P. O. Box 1009
Carlson, E. C., 623 Pine
Christy, John P., 623 Pine Blvd.
Cline, Harold H., Piedmont 63957
Dinelli, Frank E., 215 Oak St.
Engelhardt, Robert C., Kneibert Clinic
Fraser, Richard A., 621 Pine
Gernstetter, Sangwill L., P. O. Box 337
Hansbrough, Eugene T., 623 Pine Blvd.
Harwell, J. Lester, Plantation House, Apt. 104, 2400-44th St., Lubbock, Tex. 79412
Hecker, Joseph E., Kneibert Clinic
Hoja, W. Alexander, Kneibert Clinic
Hunt, John L., 2106 Jackson Rd.
Kneibert, Fred L., Kneibert Clinic
Ladyman, George H., 623 Pine St.
Leroux, Gene, Doniphan 63935
Lestmann, Henry E., 202 Plum, Doniphan 63935
Loughead, John R., 1201 Lurlyn Dr.
McLain, Bobby M., P. O. Box 447
McLane, Jerry F., 330 N. 2nd St.
McPheeters, James W., Sr., 330 N. 2nd St.
Macauley, Bernard J., 215 Oak St.
Markel, Arthur D., Kneibert Clinic
May, Albert L., Jr., 330 N. 2nd St.
Miller, David V., Kneibert Clinic
Morgan, Marvin W., 2710 Shady Lane
Parker, Arthur C., Jr., Kneibert Clinic
Plunkett, Littleton J., Jr., 330 N. 2nd
Ramirez, Ricardo M., Kneibert Clinic
Raper, Charles A., 330 N. 2nd St.
Reddy, Sarvotham K., 623 Pine Blvd.
Robertson, William D., Poplar Bluff
Ruff, T. Eugene, Kneibert Clinic
Shriver, Ronald G., 623 Pine Blvd.
Tiffany, Delbert E., Rt. 3, Box 36, Peaceful Acres
Till, Bennie N., 2030 Meadows
Traxel, William Louis, 623 Pine Blvd.
Tuma, Arthur T., 215 Oak St.
Turner, James H., 217 Oak St.
Turner, William F., 217 Oak St.
Varma, D. K., 2506 N. Main
White, Barry B., 330 N. 2nd St.
Woods, Tom, Kneibert Clinic

CALDWELL COUNTY
(Grand River Medical Society)

CALLAWAY COUNTY MEDICAL SOCIETY
(Fulton 65251)

Brown, John J., 101 E. 6th St.
Brown, Katherine S., 1304 Vine St.
Cremer, William J., State Hosp. No. 1
Domke, Herbert R., 221 W. High, Jefferson City 65101
Durst, Henry, 610 Court St.
Gish, Rutledge, 5 E. 5th St.
Groce, George, 820 Jefferson St.
Hill, James E., 820 Jefferson St.
Jackson, Vernon B., State Hosp. No. 1
Osbourn, Richard A., 820B Jefferson
Peterson, Donald B., State Hosp. No. 1
Ritterbusch, James K., State Hosp. No. 1
Sydow, Henry A., 102 Saults Addition
Tuttle, Jay F., Farmington State Hospital, Farmington 63640
Wood, George F., 614 Market St.

CAMDEN COUNTY

Carnell, B. M., Camdenton 65020 (Member Mid-Missouri County Medical Society)
Garrison, T. W., Camdenton 65020 (Member Mid-Missouri County Medical Society)
Holley, Donald B., Camdenton 65020 (Member Mid-Missouri County Medica Society)
Wayland, Thomas A., Camdenton 65020 (Member Cole County Medical Society)

CAPE GIRARDEAU COUNTY MEDICAL SOCIETY
(Cape Girardeau 63701)

Alyea, J. O., 937 Broadway
Ashley, Hugh V., P. O. Box 618
Ashley, Hugh V., Jr., P. O. Box 618
Bahn, Cbarles F., 801 S. Mount Aubur Rd.
Barnes, Seth S., 1854 Broadway
Blankenship, Dale M., Doctor's Park
Bowman, William K., 14 Doctor's Park
Burford, Edwin K., Jr., 937 Broadway
Campbell, Edward D., 937 Broadway
Chapman, Jean A., 801 S. Mount Aubur Rd.
Cochran, Jo R., 24 N. Sprigg St.
Coulson, Forest H., 19 Doctor's Park
Cozean, Charles H., Jr., 937 Broadway
Crowe, John T., 937 Broadway
Dinkins, James A., 36 Doctor's Park
Downey, Jon Patrick, 210 Christine
Edwards, Donald E., 937 Broadway
Elrod, Dennis B., 211 N. Sprigg St.
Essmyer, Joseph K., 937 Broadway
Estes, Albert M., 714 Broadway
Herbert, Charles T., 824 Good Hope St.
Holcomb, John K., 24 N. Sprigg St.
Horn, Paul C., Doctor's Park
Hoxworth, Gerald M., 313 Woodhill Rd., Columbia 65201
Hunt, Robert S., 10 Doctors' Park
Jaeger, Joseph N., 208 S. High St., Jackson 63755
Johnson, Earl W., 937 Broadway
Johnson, Ernest D., 937 Broadway
Jones, David N., 210 Christine
Jung, J. Marshall, Box 417, Illmo 63754
Kasten, Melvin C., 1209 Sailer Circle
Keim, John H., 1845 Woodlawn 65804
Kinder, James A., 937 Broadway
Kinder, Jerry L., Doctors' Park
Kratz, Paul E., 2560 Gordonville Rd.
Lovinggood, Thomas A., 2505 Allendale
McDonald, Eugene F., 125 Court St., Jackson 63755
McGinty, Charles P., 10 Doctors' Park
Magaletta, George E., 937 Broadway
Nunnelly, Gordon M., 1924 Broadway
Nussbaum, Paul B., 1858 Broadway
Oehler, William F., 213 N. Sprigg St.
Otto, Thomas G., 1912 Broadway
Parsons, D. LeRoy, 24 N. Sprigg St.
Rapp, Harold B., 1011 N. Henderson St.
Rawlins, Fred E., 1607 Berthing Ave.
Reimer, Donald Ross, 234 Greenwood, Topeka, Kan. 66601
Reynolds, Garland A., P. O. Box 817
Ridings, Harold D., 937 Broadway
Ritter, C. John, 801 S. Mount Auburn Rd.
Ritter, Carl F., 937 Broadway
Ritter, Raymond A., 2408 Terry Hill
Ritter, Raymond A., Jr., 1912 Broadway
Seabaugh, L. R., Doctors' Park
Seabaugh, William O. L., 24 N. Sprigg St.
Shoss, Milton, 937 Broadway
Sparkman, Thomas C., 601 N. Kingshighway
Spence, Paul A., 24 N. Sprigg
Stewart, Wendell K., 723 North Sunset
Talbert, Clifford R., 801 S. Mount Auburn Rd.
Terry, James W., Jr., #18 Doctors' Park
Tygett, Glenn J., 834 Alta Vista Dr.
Tygett, Joseph N., 17 Doctors' Park
Weeks, George R., 937 Broadway
Williams, W. A., Jr., 24 N. Sprigg St.
Wilson, Charles F., 714 Broadway
Wolff, Paul G., 1819 Broadway

CARROLL COUNTY
(Grand River Medical Society)

CASS COUNTY
(West Central Missouri Medical Society)

CEDAR COUNTY
(West Central Missouri Medical Society)

CHARITON-MACON-MONROE-RANDOLPH COUNTY MEDICAL SOCIETY

Arnold, Eugene L., 1429 Central Ave., St. Louis 63139
Baker, Josephine D., Moberly 65270
Barnett, Floyd A., Paris 65275
Campbell, James E., Macon 63552
Chute, W. Deward, Moberly 65270
Cohrs, Clarence C., Moberly 65270
Collins, Gretchen D., Macon 63522
Dreyer, Philip V., Huntsville 65259

° Doctor of Osteopathy.

Eggleston, Donald E., Macon 63552
Fleming, J. Will, Jr., Moberly 65270
Fleming, Thomas S., Moberly 65270
Harms, Florian L., Salisbury 65281
Huber, Lasley E., Moberly 65270
Hudson, G. R., Moberly 65270
Miller, D. Herbert, 8555 S. Lewis, Apt. 201, Tulsa, Okla. 74136
Ragsdale, George M., Paris 65275
Streetor, Roderick D., 245 Union Blvd., St. Louis 63108
Stuart, Daniel D., Brunswick 65236
Tompson, Robert V., 423 E. Logan, Moberly 65270
Young, Robert H., Moberly 65270

CHRISTIAN COUNTY (Ozarks Medical Society)

CLARK COUNTY (Lewis-Clark-Scotland County Medical Society)

CLAY COUNTY MEDICAL SOCIETY

Adams, Howard D., 114 N. Water St., Liberty 64068
Allain, James J., 2700 Hospital Ave., N. Kansas City 64116
Allan, James R., #6 Westowne Pl., Liberty 64068
Allen, Louis A., 2800 Hospital Dr., N. Kansas City 64116
Andrews, Berneil W., 2700 Hospital Dr., N. Kansas City 64116
Armstrong, Jay H., 4812 Black Swan Dr., Shawnee Mission, Kan. 66216
Arst, Herbert E., 408 E. 68th St. N., Kansas City 64118
Balhuizen, John, 5601 N. Antioch Rd., Kansas City 64119
Bates, George C., 2700 Hospital Dr., N. Kansas City 64116
Battmer, Robert E., 114 N. Water, Liberty 64068
Bliss, Joy V., 116 South Street, Excelsior Springs 64024
Boone, Daniel C., 5800 N. Grand Ave., Kansas City 64118
Bowles, Richard P., 114 N. Water St., Liberty 64068
Burke, Emmet K., 5140 Antioch Rd., Kansas City 64119
Castillo, Michael E., 2601 Kendallwood Pkwy., Kansas City 64119
Chiles, David R., Box 238, Smithville 64089
Cook, Jerry W., 7010 N. Cherry, Kansas City 64118
Cramer, Quentin, 1073 S. Shore Dr., Parkville 64048
Deligeorges, John, 7010 N. Cherry, Kansas City 64118
Denton, Robert E., Smithville 64089
Demoncourt, John E., Smithville 64089
Devine, Mark W., Jr., 5601 Antioch Rd., Kansas City 64119
Dolan, C. Terrence, 2700 Hospital Dr., N. Kansas City 64116
Dunham, Robert H., 6022 N. Antioch Rd., Kansas City 64119
Edwards, Theodore F., 2029 Burlington St., Kansas City 64116
Fakhoury, Donald A., 4030 N. Oak St., Kansas City 64111
Fischer, Edward H., Suite 415, 2929 Baltimore Ave., Kansas City 64108
Fischer, Jose, 8515 W. 71st, Overland Park, Kan. 66204
Flanders, Virgil E., 2022 W. 91st St., Leawood, Kan. 66206
Fotopoulos, Chris K., 201 E. 21st Ave., N. Kansas City 64116
Fowler, I. Charles, 2025 Swift, N. Kansas City 64116
Freeman, Jerry C., 5601 Antioch Rd., Kansas City 64119
Galbol, Harley, 522 Elms Blvd., Excelsior Springs 64024
Gauer, Robert J., 5601 N.E. Antioch, Kansas City 64119
Gilani, Abdollah, 2700 Hospital Dr., N. Kansas City 64116
Haffner, Joel J., 2018 McDowell Rd., Vincennes, Ind. 47591
Haley, Ted M., 405 E. 19th Ave., N. Kansas City 64116
Hall, James W., 7010 N. Cherry, Kansas City 64118
Hayes, Lawrence L., 8400 N. Oak Trafficway, Kansas City 64155
Hedges, Richard C., 402 St. Louis Blvd., Excelsior Springs 64024
Hendren, Thomas H., 201 E. 21 Ave., N. Kansas City 64116
Hodge, Robert H., 2029 Burlington Ave., Kansas City 64116
Houck, Russell M., V. A. Hospital, Kecoughtan, Va. 23367
Huddleston, Harvey T., Smithville Clinic, Smithville 64089
Ise, Frank H., 2030 Swift Ave., N. Kansas City 64116
King, Phillip E., 529 N. Fairview, Liberty 64068
Kirkland, Jerry A., 8630 N. Oak Trafficway, Kansas City 64155
Kuenzi, Donald E., 8630 N. Oak Trafficway, Kansas City 64155
Langhus, Melvin O., 104 W. Englewood Rd., N. Kansas City 64118
Lanning, R. James, 2700 Hospital Dr., N. Kansas City 64116
Littlejohn, Robert T., 2700 Hospital Dr., N. Kansas City 64116
McCormick, James E., 4030 N. Oak St., Kansas City 64111
McCracken, Samuel R., Box 220, Excelsior Springs 64024
McPhee, William R., 2800 Hospital Dr., Kansas City 64116
Mullins, Bernard L., 405 E. 19th St., N. Kansas City 64108
Muro, F. Del, 5601 N. Antioch Rd., Kansas City 64119
Musgrave, David E., Excelsior Springs 64024
Negrete, Abelardo, 2700 Hospital Dr., N. Kansas City 64116
Parker, Robert H., 5601 N. Antioch Rd., Kansas City 64119
Perico, Carlos J., 405 E. 19th Ave., Kansas City 64116
Pileggi, Felix A., 405 E. 19th St., N. Kansas City 64108
Porter, Russell C., 3747 Atlantic #620, Long Beach, Calif. 90680
Purcell, P. L., Smithville 64089
Pyron, Katharine A., 5140 N.E. Antioch Rd., Kansas City 64119
Raines, Oney C., III, 2700 Hospital Dr., N. Kansas City 64116
Reeder, Charles C., Smithville Clinic, Smithville 64089
Revare, Paul, 4100 Vivion Rd., Kansas City 64119
Robichaux, Eugene B., 810 Bell Dr., Excelsior Springs 64024
Robinson, Van M., 2700 Hospital Dr., N. Kansas City 64116
Sanders, George E., P.O. Box 207, Excelsior Springs 64024
Sawyer, Floyd E., 5350 N. Oak St. Trafficway, Kansas City 64118
Schertz, Truman B., 2700 Hospital Dr., N. Kansas City 64116
Schultz, Robert V., 1940-152 Highway, Liberty 64068
Schutz, John P., 1236 Jesse James Rd., Excelsior Springs 64024
Shaw, Robert F., 605 Wood Court, Liberty 64068
Slaughter, Carl R., 1001 N. Woodland, Kansas City 64118
Somoza, Jose R., 2800 Hospital Dr., North Kansas City 64116
Soper, William D., 1236 N. Jesse James Rd., Excelsior Springs 64024
Sportsman, Weldon L., 410 N.E. 68th St. North, Kansas City 64118
Stratman, Clarence A., 405 N.W. 53rd, Kansas City 64118
Tharp, Judith L., P. O. Box 717, Platte City 64079
Thomas, Fred A., 5601 N. Antioch Rd., Kansas City 64119
Thomas, Thomas C., P.O. Box 217, Liberty 64068
Trimble, David P., Jr., 116 South St., Excelsior Springs 64024
Triplett, Daniel A., 2700 Hospital Dr., N. Kansas City 64116
Vilmer, Charles, 2030 Swift, N. Kansas City 64116
Wald, Donald M., 2800 Hospital Dr., N. Kansas City 64116
Waterman, Franklin M., Liberty 64068
Werner, Dean F., 2025 Swift St., N. Kansas City 64116
Werner, Franklin C., 5140 Antioch Rd., Kansas City 64119
Williams, John M., 102 S. Forest Ave., Liberty 64068
Williams, Robert D., 6700 Troost, Kansas City 64131
Williams, Thomas A., 9601 Manor Rd., Leawood, Kan. 66206
Williamson, G. L., 2030 Swift, N. Kansas City 64116
Withrow, John B., 2800 Hospital Dr., N. Kansas City 64116
Workman, Charles E., 2700 Hospital Dr., N. Kansas City 64116
Wright, Earl J., 8196 N.W. Kirkwood Dr., Kansas City 64151

CLINTON COUNTY MEDICAL SOCIETY

Luckenbill, Paul T., Plattsburg 64477
Ozenberger, Larry A., Plattsburg 64477
Spalding, Wilber B., Plattsburg 64477
Sweiger, James H., Plattsburg 64477

COLE COUNTY MEDICAL SOCIETY (Jefferson City 65101)

Allan, James E., 2009 E. McCarty
Belden, Edgar A., 2124 Lowell
Bowe, Edwin Earl, 915 Leslie Blvd.
Bregant, Robert E., 1505 Southwest Blvd.
Clark, Kendall A., 515 E. High St.
Cooper, Charles W., 423 Cherry St.
Courter, Larry P., 1505 Southwest Blvd.
Cox, William A., 105 W. High
Davisson, Walter F., Jr., 913 Leslie Blvd.
Doyle, Matthew J., 515 E. High St.
Exon, C. Stuart, 1505 Southwest Blvd.
Files, James B., Charles E. Still Hospital
Fullgrabe, E. A., State Office Bldg.
Garner, Lynn M., State Division of Health
Garner, Royal S., 1804 Southwest Blvd.
Gentry, Merritt L., P.O. Box 570
Gordon, James S., 915 Leslie Blvd., Suite E.
Guhleman, Henry V., Jr., 506 E. High
Gurnee, Landon H., 515 E. High St.
Handler, Fred P., 614 Boonville Rd.
Hauser, Robert J., 1431 Southwest Boulevard
Kanagawa, Harold K., 701 W. High
Kelly, Marshall W., 612 E. High St.
Klebba, Larry B., P. O. Box 403
Leslie, James T., Jr., 1433 Southwest Blvd.
Loyd, Earl L., Riviera Heights, Holts Summit 65043
McCaffree, Mary K., 1505 Southwest Blvd.
McHaney, John W., 606 E. High St.
Mansur, Edward E., 519 S. Carolina Dr. Stuart, Fla. 33494
Matthews, John I., 701 W. High
Maxey, Hugh W., 2412 Sterling, Quincy, Ill. 62301
Meier, Francis X., 1913 Hayselton Dr.
Meinershagen, Charles W., 111 Forest Hill
Moseley, Otis O., Box 248, Osage Beach 65065
Ossman, Julian A., 2407 W. Main
Robb, Harold Phillip, 722 Jefferson
Russell, Joseph P., Division of Health
Ryan, Thomas J., 1433 Southwest Blvd.
Sanders, Jack S., 1505 Southwest Blvd.
Schmidt, J. H., 824 Southwest Blvd.
Schokker, Johannes, 2009 E. McCarty
Scott, E. David, 2009 E. McCarty
Sennott, John S., 515 E. High St.
Shull, G. Donald, 521 E. High St.
Siu, Kenneth K. C., 915 Leslie Blvd.
Stauffer, Harry B., 830 Boonville Rd.
Stricker, Harold C., 1431 Southwest Boulevard
Sugarbaker, Everett D., 503 E. High St.
Summers, Joseph S., Jr., 515 E. High St.
Tanner, Robert H., 1505 Southwest Blvd.
Taylor, Leon A., 1104 W. Main
Tietjen, Frederick O., 1433 Southwest Blvd.
Van Vranken, Eugene E., 221 W. High
Wallace, John K., II, 220 Ridgeway Dr.
Watts, Byron E., 1505 Southwest Blvd.
Wayland, Thomas A., Box 239, Camdenton 65020
Werth, Joseph, 917 Leslie Blvd.
Winegar, Alvon C., 1431 Southwest Boulevard

COOPER COUNTY MEDICAL SOCIETY (Boonville 65233)

Abele, Wm. A., 329 Main
Avery, Willard B., 329 Main St.
Diekroeger, Manuel L., Route 1
Hata, Daikichi, 329 Main St.
Humphreys, Edward T., 329 Main St.
Stuart, Byron M., 329 Main St.
Winn, George W., 329 Main St.

CRAWFORD COUNTY (Mid-Missouri County Medical Society)

DADE COUNTY (Dallas-Hickory-Polk-Dade Medical Society)

DALLAS-HICKORY-POLK-DADE COUNTY MEDICAL SOCIETY

Barnett, Charles H., Bolivar 65613
Bauer, Harold A., Lockwood 65682
Griffin, Evelyn, Buffalo 65622

° Doctor of Osteopathy.

Griffin, Olin A., Jr., Buffalo 65622
Harrell, Henry J., Rt. 1, Box 535, Summerfield, Fla. 32691
Kahler, Monte R., Bolivar 65613
Koon, Ben H., Bolivar 65613
McCraw, Doyle C., Bolivar 65613
McNeel, Lee A., Jr., Greenfield 65661
Mishra, Dwarka Nath, Humansville 65674
Robinson, George G., Humansville 65674

DAVIESS COUNTY
(Grand River Medical Society)

DEKALB COUNTY
(Grand River Medical Society)

DENT COUNTY
(Mid-Missouri County Medical Society)

DOUGLAS COUNTY
(South Central Counties Medical Society)

DUNKLIN COUNTY MEDICAL SOCIETY

Benson, Leo J., Jr., Kennett 63857
Cash, Charles R., Kennett 63857
Croom, Dorwyn W., Malden 63863
Dunmire, George Q., Kennett 63857
English, Wallace D., Cardwell 63829
Garrison, Norman A., Jr., 919 S. Jackson, Kennett 63857
Hopkins, Florian G., Gideon 63848
Legan, John K., Kennett 63857
Miltenberger, Paul C., Kennett 63857
Morehead, William E., Malden 63863
Palenske, Robert L., Hornersville 63855
Peck, Chester R., Jr., Kennett 63857
Pu, Pin H., P.O. Box 552, Kennett 63857
Rutledge, William J., Campbell 63933
Santos, Romeo I., Kennett 63857
Sisler, Maynard Lee, 215 Teaco Rd., Kennett 63857
Tarver, Quinton, Kennett 63857
Wilson, Loys C., Kennett 63857
Zimmerman, Joe A., Kennett 63857

FRANKLIN-GASCONADE-WARREN COUNTY MEDICAL SOCIETY

Baker, Donald L., Union 63084
Bonney, Samuel C., Washington 63090
Bozzo, Raymond J., Washington 63090
Brenner, Paul A., Owensville 65066
Crawford, Robert M., Sullivan 63080
de la Torre, John J., Sullivan 63080
Denny, Hubert M., P. O. Box 387, Union 63084
Eisenmann, Benjamin P., New Haven 63068
Eyermann, H. Walter, Warrenton 63383
Farrell, S. L., Washington 63090
Hoelscher, Harold F., Warrenton 63383
Mays, Frank G., Washington 63090
Mitchell, Thomas J., St. Clair 63077
Moellenhoff, Robert W., Washington 63090
Murney, Joseph A., Washington 63090
Post, John P., Washington 63090
Richardson, George A., Union 63084
Richardson, William R., Union 63084
Royse, Roy P., Sullivan 63080
Ryan, John B., Washington 63090
Schmidt, Charles A., Gerald 63037
Shea, James G., Washington 63090
Steinbeck, Herbert D., Mamansco Rd., Ridgefield, Conn. 06877
Strehlman, Benjamin G., Union 63084
Workman, George M., Hermann 65041

GASCONADE COUNTY
(Franklin-Gasconade-Warren County Medical Society)

GENTRY COUNTY
(Northwest Missouri Medical Society)

GRAND RIVER MEDICAL SOCIETY
(Caldwell-Carroll-Livingston-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb Counties)

Allen, Erroll W., Carrollton 64633
Atcheson, Windsor B., Trenton 64683
Bales, Eugene L., Carrollton 64633
Bohnsack, Ralph W., Brookfield 64628
Brennan, Raymond J., Chillicothe 64601
Broyles, Watkins A., Bethany 64424
Carter, Howard, Hamilton 64644
Cofer, T. N., Chillicothe 64601
Conrad, Joseph, Chillicothe 64601
Cross, Albert D., Trenton 64683
Daley, Frank R., Hamilton 64644
Dixon, John R., Brookfield 64628
Dowell, Donald M., Chillicothe 64601
Dowell, J. Larry, Pattonsburg 64670
Duffy, Oliver F., Trenton 64683
Ellsworth, Willard, Cainsville 64632
Fair, William L., Chillicothe 64601
Fuson, William A., Trenton 64683
Gale, Joseph F., Chillicothe 64601
Galvez, Sisenande P., Jr., 1500 N. Kansas, Marceline 64658
Gary, George, Marceline 64658
Gearhart, Merriam, Bethany 64424
George, Theodore, 1500 N. Kansas, Marceline 64658
Gilliland, Charles E., Cameron 64429
Howell, Billy D., Brookfield 64628
Kimberlin, Herbert C., Trenton 64683
McArtor, Thomas R., Browning 64630
Magill, Joseph S., Milan 63556
Mandler, George, Chillicothe 64601
Nixon, Edward E., Gallatin 64640
Platz, John H., Carrollton 64633
Ryan, David L., 600 E. 9th, Trenton 64683
Smith, Robert W., 321 S. Main, Brookfield 64628
Staton, R. Hamilton, Carrollton 64633
Szymanski, Stanley R., 329 N. Rollins, Macon 63552
Vandiver, Virgil D.. Chillicothe 64601
Vinyard, Jack L., St. John's Medical Center, 2727 McClelland Blvd., Joplin 64801
Wilson. Fred K.. Winston 64689
Yoon, Jin Soo, 103 11th, Chillicothe 64601

GREENE COUNTY MEDICAL SOCIETY
(Springfield)

Allen, Jerry H., 1211 S. Glenstone St., 65804
Allison, James B., 2200 E. Sunshine 65804
Ancheta, Apolinario A., 1715 Boonville 65803
Anthony, Dallas D., Professional Bldg. 65806
Ash, Charles J., Professional Bldg., 65806
Ashley, Thomas E., 1211 S. Glenstone St. 65804
Atkinson, Thomas E., Jr., 609 E. Cherry St. 65806
Auner, Cecil R., 600 S. Glenstone St. 65802
Back, Donald K., 1211 S. Glenstone St. 65804
Bailey, Alan B., 609 Cherry 65806
Baldwin, Richard, 600 S. Glenstone St. 65802
Barnhill, Floyd R., 600 S. Glenstone 65802
Beard, R. Wheatley, Professional Bldg. 65806
Beisner, Donald H., 600 S. Glenstone 65802
Benson, Ronald G., 900 E. Cherry 65806
Bentley, John D., 419 Professional Bldg. 65806
Berry, Paul T., 1740 S. Glenstone 65804
Blades. Ross D., 1211 S. Glenstone St. 65804
Bonebrake, MacDonald, Professional Bldg. 65806
Boone, Martin H., Jr., Rt. 2, Box 315, 65802
Broaddus, Loren, 1550 E. Sunshine 65804
Brown, David W., Professional Bldg. 65806
Brown, James T., 1653 S. National St. 65804
Brown, Lyman D., 604 Empire Bldg. 65806
Burkey, Jordan W., Professional Bldg. 65806
Busiek, Erwin F., Professional Bldg. 65806
Busiek, Paul J., 1717 E. Grand 65804
Busiek, Urban J., Professional Bldg. 65806
Callaway, Guy D., 1155 S. Delaware St. 65804
Callaway, Guy D., Jr., 1211 S. Glenstone St. 65804
Carr, Phillip W., 1211 S. Glenstone 65804
Cheek, J. William, 609 Cherry 65806
Christy, Raymond A., Jr., 1211 S. Glenstone St. 65804
Clarke, Michael J., 609 Cherry 65806
Clary, William F., 1636 S. Glenstone St. 65804
Clawson, James W., Professional Bldg. 65806
Clayton, Edgar L., Professional Bldg. 65806
Cochran, Thomas E., Jr., 2423 Brentwood Blvd. 65804
Coller, Frederick C., 2433 Marlan St. 65802
Conrad, Raymond C., 609 Cherry St. 65806
Cook, James R., 2333 E. Glenwood 65804
Cordonnier, James K., 1550 E. Sunshine 65804
Corry, Francis M., 1211 S. Glenstone 65804
Crane, John Bruce, 1211 S. Glenstone 65804
Crawford, Oral B., Professional Bldg. 65806
Creighton, John C., Professional Bldg. 65806
Cunningham, Darral D., 1715 Boonville Ave. 65803
Dillard, Erin M., Professional Bldg. 65806
Dills, Joseph N., 1554 S. Campbell 65804
Dolan, Daniel L., Professional Bldg. 65806
Domann, Darrel D., Professional Bldg. 65806
Duncan, Robert D., 1534 E. Sunshine 65804
Elkadi, Ahmed, 315 Professional Bldg. 65806
Elkins, Ronald F., 2830 E. Glenwood 65804
Ellis, Francis J., Professional Bldg. 65806
Ellis, Harry L., Professional Bldg. 65806
Emery, Frank E., 1550 E. Sunshine 65804
Evans, Ezra L., Jr., 2457 E. Barataria 65804
Farthing, Gene W., 1636 S. Glenstone St. 65804
Ferguson, John L., 1550 E. Sunshine 65804
Ferguson, John P., Jr., 609 Cherry 65806
Ferrell, Thomas E., Jr., 1550 E. Sunshine Blvd. 65804
Fitch, C. H. Max, 1711 Boonville Ave. 65803
Fogerson, Virginia L., 900 S. Pickwick 65804
Fogle, Philip R., 304 Professional Bldg. 65806
Francis, William C., 600 S. Glenstone St. 65802
Gentry, Michael A., 1211 S. Glenstone 65804
Gerdes, John A., St. John's Hospital 65804
German, Walter A., Jr., 1211 S. Glenstone St. 65802
Giddings, Frank C., Burge Protestant Hosp. 65803
Giffin, James M., Professional Bldg., 65806
Glover, Jack F., 1550 E. Sunshine 65804
Gorelick, David F., Professional Bldg. 65806
Gose, Don F., 1550 E. Sunshine 65804
Haen, Charles J., 1630 N. Jefferson 65803
Hall, David W., Rt. 2, Rogersville 65742
Hall, Durward G., 2442 S. Fremont 65804
Hamburg, Frederic L., 600 S. Glenstone 65802
Hanan, Ernest B., 724 E. Kingsbury 65804
Hanss, Armand W., 3500 Cherry 65804
Harmon, Ben C., 1211 S. Glenstone St. 65804
Harrison, Stratton W., Professional Bldg. 65806
Harvey, Harold D., 1531 E. Sunshine 65804
H'Doubler, Charles E., Professional Bldg. 65806
H'Doubler, Francis T., Jr., Professional Bldg. 65806
H'Doubler, Peter B., 609 Cherry St., Suite 114 65806
Herfkens, Kenneth D., 609 Cherry, 65806
Hills, Joseph E., 2917 Natural Bridge 65804
Holland, Robert D., 1211 S. Glenstone 65804
Hollis, Richard W., Professional Bldg. 65806
Holmes, Daniel E., Route 9, Box 191 65804
Holmes, David R., 1636 S. Glenstone St. 65804
Hoover, H. Lee, Jr., 1330 E. Walnut St. 65802
Horton, James D., Professional Bldg. 65806
Hubbard, Sally L., 901 S. National 65802
Huewe, Douglas A., 609 Cherry 65806
Hulstra, Johannes F. W., 1211 S. Glenstone St. 65804
Ippensen, John H., 600 S. Glenstone 65802
Isaac, Anita M., 1423 N. Jefferson 65802
Ivy, Henry B., 600 S. Glenstone St. 65802
Jameson, James E., Professional Bldg. 65806
Jobe, Charles L., Jr., 1211 S. Glenstone 65804
Johnson, Fritz M., 609 Cherry 65806
Johnson, George A., 229 Professional Bldg. 65806
Johnson, Joseph C., Jr., 1211 S. Glenstone 65804
Johnson, Warford B., Professional Bldg. 65806
Johnson, William F., Professional Bldg. 65806
Johnston, Joseph L., 2855 Southern Hills Blvd. 65804
Jones, Harold L., 1550 E. Sunshine 65804
Key, James S., Professional Bldg. 65806
Klingner, George M., 1630 N. Jefferson St. 65803
Klingner, George M., Jr., 1630 N. Jefferson 65803
Knabb, Arthur D., 1630 N. Jefferson St. 65803
Knabb, Kenneth E., 1630 N. Jefferson St. 65803
Kolze, Vernon W., 600 S. Glenstone 65802
Langston, Walter R., Professional Bldg. 65806
Leagus, Charles J., Jr., 1211 S. Glenstone 65804
Le Fevre, Philip J., 1636 S. Glenstone 65804
Leidinger, Karl J., Republic 65738
Lemmon, George B., Prof. Bldg. 65806

° Doctor of Osteopathy.

Lewis, Noel R., 1423 N. Jefferson Ave. 65803
Litton, Lyle D., Cox Medical Center 65803
Lockhart, Charles E., Professional Bldg. 65806
Loeb, Richard H., 1211 S. Glenstone 65804
Lorenc, Ernest, Professional Bldg. 65806
Lovett, Robert L., 2850 Versailles 65804
Lowe, Horace A., Jr., 114 Professional Bldg. 65806
Lurie, Harold H., 600 S. Glenstone St. 65802
McAlhany, Howard J., 609 Cherry St. 65806
McKinsey, John J., Professional Bldg. 65806
McLaughlin, Richard D., 117 Professional Bldg. 65806
Maddux, William P., Professional Bldg. 65806
Maher, Robert W., Professional Bldg. 65806
Mantell, Jack M., 1550 E. Sunshine 65804
Maple, Francis M., 1211 S. Glenstone St. 65804
Martin, James David, General Delivery, Yellville, Ark. 72687
Menchetti, Don E., 1630 N. Jefferson Ave. 65803
Mentgen, Carl N., 1550 E. Sunshine 65804
Michael, Harvey R., 1211 S. Glenstone 65804
Milne, Jay L., 609 Cherry St. 65806
Moore, De Armond, 1211 S. Glenstone 65804
Morton, Paul C., 1508 E. Stanford 65804
Moseley, F. Thomas, 609 Cherry St. 65806
Napper, Marvin L., Professional Bldg. 65806
Neu, Leo T., Jr., 3008 Carlisle Circle 65804
Olson, Elbert R., 609 Cherry 65806
Overend, Don S., 1211 S. Glenstone St. 65804
Palcheff, Chris L., 1636 S. Glenstone St. 65804
Park, William I., Jr., Professional Bldg. 65806
Parlato, George S., 107 Professional Bldg. 65806
Penninger, William H., 600 S. Glenstone St. 65802
Peterson, Stanley S., 1211 S. Glenstone St. 65804
Podrecca, Guido I., Professional Bldg. 65806
Powell, Edwin M., Professional Bldg. 65806
Prater, Bill G., Professional Bldg. 65806
Pruett, Paul L., Professional Bldg. 65806
Quinn, Paul S., 1423 N. Jefferson 65802
Rainwater, Elmer H., Professional Bldg. 65806
Rigney, Levi M., 505 Woodruff Bldg. 65806
Rinker, Carl T., Jr., 2930 S. Glendale 65804
Rising, Dean R., 1211 S. Glenstone 65804
Rohhins, Judy C., 2435 E. Camhridge 65804
Robinson, Gary L., 609 Cherry 65804
Rosen, Max, 801 E. Cherry 65806
Russell, Earl D., 1503 S. Glenstone St. 65804
Sala, Jose M., 1423 N. Jefferson Ave. 65803
Sauer, Paul E., Route 11, Box 2325 65804
Scanlon, Robert C., 1711 Boonville St. 65803
Schaeffer, Edward M., 600 S. Glenstone St. 65802
Schreiber, Norman J., 642 S. Hickory Pl. 65804
Schroff, Carle H., 1630 N. Jefferson Ave. 65803
Schwartz, Eugene J., Professional Bldg. 65806
Shackter, Bruce 1., 609 Cherry, Room 406, 65806
Shane, Ramon A., 609 Cherry 65806
Siceluff, Joseph G., 609 Cherry St. 65806
Silsby, Don J., Professional Bldg. 65806
Silsby, Harry D., Professional Bldg. 65806
Simpson, Albert P., 1636 S. Glenstone 65804
Simpson, Emerson L., 1630 N. Jefferson Ave. 65803
Smith, C. Souter, 1223 S. Kenwood 65804
Snead, William H., Jr., Professional Bldg. 65806
Spalding, David L., Professional Bldg. 65806
Stewart, Robert B., 600 S. Glenstone St. 65802
Stewart, R. Wendell, Professional Bldg. 65806
Stubhlefield, Wayne, 2740 S. Glenstone 65804
Stufflebam, Robert E., 2323 E. Rosebrier 65804
Sturtevant, Harwood N., Professional Bldg. 65806
Sundstrom, Frank D., 1211 S. Glenstone St. 65804
Sweeney, Thomas P., Professional Bldg. 65806
Tarrasch, Ernest L., 1636 S. Glenstone St. 65804
Taylor, William E., Southwest Missouri State College 65802
Tendai, Mark M., 1630 N. Jefferson 65803
Terry, James F., 609 Cherry 65806
Thomasson, David D., 600 S. Glenstone St. 65802
Tillman, Walter W., Jr., Professional Bldg. 65806
Tombridge, Thomas L., Professional Bldg. 65806
Trotter, W. Yates, 1243 E. Catalpa 65804
Tsang, John L. K., 1636 S. Glenstone St. 65804
Turner, Glenn O., Professional Bldg. 65806
Vensel, Lee H., 600 S. Glenstone St. 65802
Waddell, Kenneth E., 1211 S. Glenstone St. 65804
Wakeman, J. Newton, 600 S. Glenstone St. 65802
Wakeman, J. Newton, Jr., 406 Professional Bldg. 65806
Walker, William M., Professional Bldg. 65806
Warres, Herbert L., 2614 Englewood Rd. 65804
Waterfield, Jim R., 1211 S. Glenstone St. 65804
Webb, Leslie R., Jr., 1243 E. Loren 65804
White, R. Ned, Professional Bldg. 65806
Whitlock, C. Courtney, Professional Bldg. 65806
Williams, John W., 600 S. Glenstone St. 65802
Williams, John W., Jr., 1227 Roanoke St. 65804
Wilson, Roy E., 1211 S. Glenstone St. 65804
Winsky, Arlen D., 226 Professional Bldg. 65806
Wise, Gordon F., Professional Bldg. 65806
Wittmer, Samuel C., 600 S. Glenstone St. 65802
Wong, George, Jr., 1636 S. Glenstone 65804
Wood, William W., 304 Franklin, West Plains 65775
Wooldridge, Wilfred E., Professional Bldg. 65806
Wyrsch, Leo M., Jr., 304 Professional Bldg. 65806
Yancey, Daniel L., 1211 S. Glenstone St. 65804
Zahn, Robert L., Professional Bldg. 65806

GRUNDY COUNTY
(Grand River Medical Society)

HARRISON COUNTY
(Grand River Medical Society)

HENRY COUNTY MEDICAL SOCIETY

Bradshaw, William D., Clinton 64735
Hollingsworth, Ray S., Clinton 64735
Hughes, Shelby B., Clinton 64735
Jones, Edna M., Clinton 64735
King, Richard H., Clinton 64735
Smith, James O., Clinton 64735
Smith, William J., Windsor 65360
Wetzel, Gus S., Clinton 64735

HICKORY COUNTY
(Dallas-Hickory-Polk-Dade County Medical Society)

HOLT COUNTY
(Northwest Missouri Medical Society)

HOWARD COUNTY MEDICAL SOCIETY

Bloom, W. A., Fayette 65248
Dean, Francis D., Fayette 65248
Leech, Maurice P., Fayette 65248
Marshall, William G., Glasgow 65254
Shaw, William J., Jr., Fayette 65248

HOWELL COUNTY
(South Central Counties Medical Society)

IRON COUNTY
(Mineral Area County Medical Society)

JACKSON COUNTY MEDICAL SOCIETY
(Kansas City)

Aaron, George A., 10901 Winner Rd., Independence 64052
Abaqueta, Gamaliel P., 2525 Euclid 64127
Abella, Bienvenido Z., 6400 Prospect 64132
Ahercrombie, Keith J., 6700 Troost 64131
Abrams, Bernard M., 751 E. 63rd St., 64110
Ackerman, Norman B., 4949 Rockhill Rd. 64110
*Ackley, Edward J., 3917 N. Cleveland 64117
Adelman, Arthur, 601 E. 63rd St. 64110
Adler, Federico, 601 E. 63rd St. 64110
Agee, Loren G., 11201 Colorado 64137
Aks, Daniel, 751 E. 63rd St. 64110
Alherg, Marvin R., 3525 N.W. 60th Terrace 64151
Alderman, Thomas F., 7540 Troost 64131
Allebach, H. K., 6400 Prospect 64132
Allen, Rohert E., 4320 Wornall Rd. 64111
Alsop, Wehb S., Jr., 6400 Prospect 64132
Altomare, Edward P., 1030 W. 65th 64113
Altringer, Arthur N., 5630 Mission Dr., Shawnee Mission, Kan. 66208
Ammatelli, Francis J., 7546 Troost St. 64131
Amoury, Raymond A., 24th & Gillham Rd. 64108
Anderson, Raymond B., 24th & Gillham Rd. 64108
Anderson, Richard W., 1001 Romany Rd. 64113
Andrus, Bailey C., 4320 Wornall Rd. 64111
Arbab, Ali A., 751 E. 63rd 64110
Arms, Arnold V., 4320 Wornall Rd. 64111
Arnold, John D., 24th & Cherry Sts. 64108
Aronoff, Michael E., 600 E. Sante Fe, Olathe, Kan. 66061
Aschman, Theodore H., 8740 Brooklyn 64132
Ashby, Jennifer D., 24th & Cherry 64108
Asher, A. Graham, 4706 Broadway 64112
Asnani, Mithlesh G., 825 Euclid 64124
Atwell, Floyd C., 4320 Wornall Rd. 64111
Averill, Keith H., 2316 E. Meyer Blvd. 64132
Ayotte, Nancy C., 5519 Crestwood Dr. 64110
Baer, Alvin J., 751 E. 63rd St. 64110
Baker, Philip J., 11440 E. 47th St. 64133
Balanoff, Arnold Z., 601 E. 63rd 64110
Ball, David A., 100 Trace Town, Natchez, Miss. 39120
Ballard, V. Bryce, 4320 Wornall Rd. 64111
Bankuti, Ferenc, 6400 Prospect 64132
Bare, Chester I., Jr., 7013 Lake Shore Dr. 64133
Barelli, Pat A., 4177 Broadway 64111
Barloon, James H., 6700 Troost 64131
Barnard, John L., Jr., 4320 Wornall Rd. 64111
Barnett, Gordon P., 6568 High Dr., Shawnee Mission, Kan. 66208
Barr, Glenn A., 601 E. 63rd St. 64110
Barry, Gerald W., 1948 E. Parvin Rd. 64116
Barry, William B., 4320 Wornall Rd. 64111
Basantz, Fernando V., Hickman Mills Clinic, Inc., 11201 Colorado, 64137
Baska, Richard E., 24th & Gillham Rd. 64108
Bass, Lewis N., 2310 Linwood 64109
Bass, Walter R., 9503 E. 63rd St. 64133
Bauer, Lafe W., 2929 Baltimore Ave. 64108
Baum, Frank E., 701 E. 63rd St. 64110
Bay, Merrill R., Rt. 2, Box 440, Blue Springs 64015
Beard, William J., 400 N. Murray, Lee's Summit 64063
Beatty, Arch J., 1816 E. 63rd 64130
Beatty, Eugene C., 24th & Gillham Rd. 64108
Beatty, Nina D., 24th & Gillham Rd. 64108
Beck, Calvin E., 4320 Wornall Rd. 64111
Becker, Richard R., 415 E. 63rd St. 64110
Becker, Rolfe A., 601 E. 63rd St. 64110
Beckloff, Gerald L., 10236 Bunker Ridge Rd. 64137
Bell, Hubert H., 4320 Wornall Rd. 64111
Bell, William F., 615 W. 3rd St., Lee's Summit 64063
Bennett, James D., 6700 Troost 64131
Benoit, Hector W., Jr., 4620 Nichols Parkway 64112
Benson, William F., 4320 Wornall Rd. 64111
Berenson, Sheldon E., 4620 Nichols Parkway 64112
Bergmann, Victor H., 105 Ward Parkway 64112
Berlin, Roger, 751 E. 63rd 64110
Bernreiter Michael, 1246 W. 63rd St. 64113
Berry, Guy N., 4320 Wornall Rd. 64111
Berry, Maxwell G., 4320 Wornall Rd. 64111
Bickley, James E., 4620 Nichols Pkwy. 64112
Bidwell, Robert E. G., 4320 Wornall Rd. 64111
Biggs, Alfred D., 6400 Prospect Ave. 64132
Biggs, Harry L., 63rd & Evanston 64133
Bikales, Victor W., 751 E. 63rd St. 64110
Bills, Marvin L., Plaza Time Bldg. 64112
Black, Don A., 6400 Prospect Ave. 64132

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* Doctor of Osteopathy.

Black, Eugene C., Professional Bldg. 64106
Black, Thomas C., Jr., 601 E. 63rd 64110
Blim, Richard D., 4320 Wornall Rd. 64111
Bordy, Marvin D., 601 E. 63rd St. 64110
Borenstine, Joseph, 601 E. 63rd St. 64110
Borsuk, Gregory M., 535 Blue Ridge Tower 64133
Bortnick, Eugene, 751 East 63rd St. 64110
Botwin, Arnold E., 751 E. 63rd 64110
Bouda, David W., Wornall Rd. at 44th 64111
Boughnou, Harvey P., 4545 Wornall 64111
Boutros, Amin, 3112 Linwood Blvd. 64128
Bowser, John F., 4320 Wornall Rd. 64111
Boyd, George K., 5111 Independence Ave. 64124
Boyer, Philip A., Jr., 10246 Cedarbrook Ln. 64131
Boylan, Peter C., 6306 Morningside Dr. 64113
Braby, Howard H., 1612 W. Truman Rd., Independence 64050
Bradford, John F., 4320 Wornall Rd. 64111
Brady, Arthur M., 3039 Brooklyn 64109
Brams, Jack B., 601 E. 63rd St. 64110
Braverman, Abe E., 8300 Troost 64131
Brizio-Molteni, Loredana, 330 W. 47th St. 64112
Brown, Adrian J., 12 E. 63rd St. 64113
Brown, Elwyn S., 24th & Gillham Rd. 64108
Brown, Irwin S., 4320 Wornall Rd. 64111
Brown, Menzie H., Suite 340, 2929 Baltimore Ave. 64108
Brown, Robert S., 2929 Baltimore 64108
Brown, Violeta O., 24th & Gillham Rd. 64108
Brumm, Lawrence W., 6400 Prospect 64132
Bruner, Robert E., 14909 Little Blue Rd. 64136
Brust, Carl H., 6114 Howe Dr., Mission, Kan. 66205
Bryan, William H., Jr., 3939 Prospect Ave. 64130
Bryant, T. J., 751 E. 63rd 64110
Buchanan, Barbara N., 6301 Rockhill 64131
Buckingham, William W., 310 W. 49th 64112
Buckner, Robert C., Plaza Parkway Bldg. 64112
Budke, Harold A., 306 E. 12th St. 64106
Buhler, Victor B., 2510 East Linwood Blvd. 64128
Buie, Bruce R., 11201 Colorado 64137
Bunting, Williston P., 305 W. 43rd St. 64111
Burry, Virgil F., 24th & Gillham Rd. 64108
Butcher, Robert W., 24th & Gillham Rd. 64108
Butterworth, Nelson S., 725 W. 49th Terr. 64112
Caffrey, Raymond J., 1314 W. Red Bridge 64114
Caldwell, John K., 6700 Troost 64131
Calovich, Emery R., 4620 Nichols Parkway 64112
Campbell, Frederick B., 315 Nichols Rd. 64112
Capps, Eugene C., 7921 El Monte, Shawnee Mission, Kan. 66208
Carder, George A., 434 Blue Ridge Tower 64133
Carlson, Hjalmar E., Suite 525, 2929 Baltimore Ave. 64108
Carlson, John S., 4620 J. C. Nichols Parkway 64112
Caruso, Alfred A., 1027 E. 75th Way 64131
Case, William F., 11201 Colorado 64137
Casebolt, Buford T., 415 E. 63rd 64110
Cattaneo, Ernest A., 2929 Baltimore 64108
Cavaness, Ernest W., 1010 Neptune Dr., Encinitas, Calif. 92024
Centner, Paul J., 2727 Main St. 64108
Chambers, James Q., Jr., 4620 Nichols Parkway 64112
Chandler, Robert A., 4177 Broadway 64111
Chandra, Mahesh D., 10901 Winner Rd., Independence 64052
Chapman, David W., 10901 Winner Rd., Independence 64052
Chaudhary, Mohammad A., 825 Euclid 64124
Chernoff, Selbert G., 4601 Independence Ave. 64124
Childs, Donnalea S., 4320 Wornall Rd. 64111
Childs, Richard M., 4320 Wornall Rd. 64111
Chung, Richard T., 4949 Rockhill Rd. 64110
Clark, Irving H., 5801 E. 113th St. 64134
Clasen, Arthur C., 2301 Collins Ave., Miami Beach, Fla. 33139
Cline, Merle A., 4126 St. John Ave. 64123
Clothier, Robert W., 17221 E. 23rd, Independence 64057
Clough, Charles A., 4320 Wornall Rd. 64111
Cobb, James R., 6741 Prospect Ave. 64132
Coburn, Donald F., 6400 Prospect Ave. 64132
Cochrane, Joseph J., Suite 550, 2929 Baltimore Ave. 64108
Cockerell, Sanford F., 11200 Winner Rd., Independence 64052
Coffey, Ralph R., 5211 Wornall Rd. 64112
Coffin, Theodore A., Professional Bldg. 64106
Cohen, Harry K., 751 E. 63rd St. 64110
Cohen, Robert A., 601 E. 63rd 64110
Cokingtin, Leovigildo, 10901 Winner Rd., Independence 64052
Colglazier, Mary C., 411 Nichols Rd. 64112
Colom, George A., 6700 Troost 64131
Connell, Evan S., 837 W. 58th Terr. 64113
Cooper, Charles S., 6700 Troost 64131
Coppinger, Thomas A., 2929 Baltimore Ave., 64108
Cortner, Mary C., 6700 Troost 64131
Cowan, George A. B., 4949 Rockhill Rd. 64110
Cox, Kenneth E., 4320 Wornall Rd. 64111
Cox, William L., 1465 Spruce Ave., Liberty 64068
Crocker, Albert M., 3319A East 43rd St. 64130
Crockett, James E., 4320 Wornall Rd. 64111
Cross, Edward B., 2220 Holmes 64108
Crow, Martin L., 4177 Broadway 64111
Csaki, Bela, 6700 Troost 64131
Culbertson, William F., 1253 Huntington Rd. 64113
Curran, Desmond, Federal Reserve Bank Bldg. 64106
Curran, Kevin E., 925 Grand Ave. 64106
Curts, Calvin J., 4320 Wornall Rd. 64111
Cutcliff, Daniel J., 1103 Grand 64106
Dalton, Timothy T., 6400 Prospect 64132
Dann, David S., 4949 Rockhill Rd. 64110
Darnell, Dale E., 4320 Wornall Rd. 64111
Davidson, Kendrick C., 9009 High Dr., Leawood, Kan. 66206
Davis, Donald R., 4320 Wornall Rd. 64111
Davis, Herbert V., 4620 Nichols Parkway 64112
Davis, Jack M., 6700 Troost 64131
Davis, John J., 9011 Delmar Blvd., Overland Park, Kan. 66207
Davis, Kenneth A., 315 Nichols Rd. 64112
Deeken, James H., 411 Nichols Rd. 64112
De Feo, Theodore C., Wornall Rd., at 44th 64111
DeMaria, Peter F., 8125 E. Gregory Blvd. 64133
DeMott, John D., 411 Nichols Rd. 64112
DeMotte, John A., 315 Nichols Rd. 64112
Dempsey, Herbert A., 615 W. 3rd St., Lee's Summit 64063
Devins, George S., 12 Doctors Bldg. E., 701 E. 63rd St. 64110
Dimond, E. Grey, 5650 Ward Parkway 64113
Diveley, Rex L., 4320 Wornall Rd. 64111
Dixon, George D., Wornall Rd. at 44th 64111
Dixon, Vewiser L., 2208 E. 18th St. 64127
Dlabal, Luke J., 1210 Ash Ave., Independence 64052
Doane, William L., Grandview 64030
Dodge, Mark, 4320 Wornall Rd. 64111
Doering, Robert W., 6400 Prospect Ave. 64132
Dorsch, Ervin H., 11200 Winner Road, Independence 64052
Downey, James W., Suite 450, 2929 Baltimore Ave. 64108
Drake, Roy F., 6700 Troost 64131
Draney, Thomas E., 6700 Troost 64131
Dreher, Richard L., 24th & Gillham Rd. 64108
Drisko, Robert M., Suite 500, 2929 Baltimore 64108
Drowns, Bruce V., 4320 Wornall Rd. 64111
Drury, Lawrence R., 5817 Locust 64110
Duer, Mildred C., 310 W. 47th St. 64112
Dukstein, Walter G., 6400 Prospect 64132
Duncan, William H., 911 Main St. 64105
Dunleavy, James D., 4620 Nichols Parkway 64112
Durnell, Monaford D., 615 W. Third St., Lee's Summit 64063
Dwyer, Frank X., 4620 Nichols Parkway 64112
Dwyer, Hugh L., 8379 Somerset Dr., Shawnee Mission, Kan. 66207
Egea, Fernando M., 9116 Perry Dr., Overland Park, Kan. 66212
Eisemann, Gustave, 601 E. 63rd St. 64110
Elias, David J., 9306 E. New 40 Highway, Independence 64055
Ellfeldt, Howard J., 6400 Prospect 64132
Elliott, Raymond G., Bryant Bldg. 64106
Elliott, Wade E., 710 W. 12th St. 64105
Elser, Otto H., 10901 Winner Rd., Independence 64052
Empson, Charles L., 9406 E. 63rd 64133
Engel, Lawrence P., 2335 Guilford Lane, Shawnee Mission, Kan. 66208
Engelmann, Calvin E., Suite 550, 2929 Baltimore Ave., 64108
Engleman, Reinhold, 1002 Walnut 64106
Ericcson, Samuel E. F., 425 E. 6rd 64110
Eshelman, Albert D., Blue Ridge Cutoff & New 40 Hwy., Independence 64055
Eubank, David F., 9406 E. 63rd 64133
Eubank, Dillard M., 9406 E. 63rd St. 64133
Eubank, William R., 6700 Troost 64131
Eubank, William Y., 6400 Prospect 64132
Evans, Elizabeth A., Bendix Corp., Box 1159, 64141
Evans, Lawrence L., 4320 Wornall Rd. 64111
°Everett, James E., 4 West Dartmouth Rd. 64113
Fairchild, Robert C., 8425 Reinhardt Lane, Shawnee Mission, Kan. 66206
Farley, Claude C., 6400 Prospect 64132
Farney, Jacob P., 6700 Troost 64131
Farnham, Milo M., 1612 W. Truman Rd., Independence 64050
Farnsworth, Jesse J., Suite 540, 2929 Baltimore 64108
Fayez, Jamil A., 24th & Cherry 64108
Fayne, Fred A., 751 E. 63rd 64110
Fee, Chester F., Suite 500, 2929 Baltimore 64108
Feist, George V., 7924 Paseo 64131
Feist, Wm. Edgar, 4320 Wornall Rd. 64111
Ferguson, Donald S., 2012 E. 24th St. 64127
Ferris, Carl R., 6400 Prospect 64132
Finkle, Robert H., 10901 Winner Rd., Independence 64052
Fitzgerald, Robert H., 6400 Prospect 64132
Flatley, John A., 6700 Troost 64131
Flynn, James M., Meyer & Prospect 64132
Folck, William P., 911 Main St. 64105
Forman, Louis H., 4320 Wornall Rd. 64111
Forsythe, Lees C., 4320 Wornall Rd. 64111
Forsythe, Robert W., 4320 Wornall Rd. 64111
Fouts, Dallas B., Sr., Rt. 1, Box 124, Lee's Summit 64063
Fowler, Fred D., 4320 Wornall Rd. 64111
Fowler, James W., 6700 Troost 64131
Francisco, Clarence B., 24th & Gillham Rd. 64108
Franco, Pilar Juan, 1734 E. 63rd 64110
Franklin, Curtis U., 4301 Main 64111
Frick, John P., 116 Huntington Rd. 64113
Friedman, Morris L., 601 E. 63rd St. 64110
Fritzlen, Thomas J., 825 W. 63rd St. 64113
Fuhrman, Donald L., 4320 Wornall Rd. 64111
Fury, Tex E., 10114 Locust 64131
Gaines, Albert H., 4900 Swope Parkway 64130
Gainey, Harold L., 4320 Wornall Rd. 64111
Gaitonde, Mangesh R., 10124 Locust 64131
Galbreath, Ashford M., 4706 Broadway 64112
Gard, Raymond F., #2 Douglas-Eastborough, Wichita, Kan. 67207
Garner, James H., Jr., 6700 Troost 64131
Garrison, Roy F., 6400 Prospect 64132
Gaskins, John H., 4320 Wornall Rd. 64111
Gauthier, Charles P., 2316 E. Meyer Blvd. 64132
Geha, Braham J., 7546 Troost Ave. 64131
Geiger, William A., Jr., 6400 Prospect 64132
Gempel, Paul A., 5322 Falmouth Rd., Shawnee Mission, Kan. 66205
Gentry, Enoch N., Jr., 4706 Broadway 64112
Gerdes, Joseph R., 1103 Grand 64106
Germann, Donald R., Wornall Rd. at 44th 64111
Gibson, David M., St. Luke's Hosp. 64111
°Gilgore, Alfred, 825 Euclid 64124
Gillen, Billy A., 102 E. 51st 64112
Ginardi, Donald E., 4643 Wyandotte St. 64112
Ginsberg, Norman A., Suite 320, 2929 Baltimore Ave. 64108
Gist, William W., 9406 E. 63rd 64133
Givler, Robert L., Meyer Blvd. at Prospect 64132
Glasscock, Ernest L., 6214 High Dr., Prairie Village, Kan. 66208
Glazer, Melvin L., 8300 Troost 64131

° Doctor of Osteopathy.

Constitution and Bylaws

of the

Missouri State Medical Association

Adopted 1903

1973 Revision

113 MADISON JEFFERSON CITY, MO. 65101

Constitution

ARTICLE I. NAME OF THE ASSOCIATION

The name and title of this organization shall be the Missouri State Medical Association.

ARTICLE II. PURPOSE

The purpose of this Association is the promotion of the science and art of medicine, the protection of public health, the betterment of the medical profession, and, by uniting with similar organizations in other states and territories of the United States, to form the American Medical Association.

ARTICLE III. MEMBERSHIP

Membership in this Association shall be limited to and include all members in good standing in component societies which hold charters from this Association.

ARTICLE IV. HOUSE OF DELEGATES

The House of Delegates shall be the legislative body of this Association and shall consist of delegates elected by the component societies as well as all Past-Presidents of the Association who will serve as Delegates-at-Large. It shall elect a Speaker and Vice-Speaker from its body. Its Secretary shall be the Secretary of the Missouri State Medical Association.

Included also in the House of Delegates shall be two student delegates, each from a different class, elected by the student body of each of the medical schools in the State of Missouri, who shall have the same rights and privileges as other delegates.

ARTICLE V. COUNCIL

The Council shall be the executive body of this Association when the House of Delegates is not in session. It shall be the judicial body of the Association when matters are referred to it for decision by the Association, by component societies or by individual members thereof. It shall consist of the President, President-Elect, Immediate Past-President, Secretary, Treasurer and the duly elected Councilors from each Councilor District. Nine members shall constitute a quorum.

ARTICLE VI. SESSIONS AND MEETINGS

Section 1. The Association shall hold an Annual Session at a place fixed by the House of Delegates, the time of which shall be fixed by the Council.

Sec. 2. Special meetings of the Association or of the House of Delegates may be called by a two thirds vote of the Council and shall be called upon a petition signed by members equal in number to one third of the total number of delegates certified for the last Annual Session.

ARTICLE VII. OFFICERS

Section 1. The officers of this Association shall be a President, a President-Elect, three Vice-Presidents, a Secretary, a Treasurer, a Speaker and a Vice-Speaker of the House of Delegates and ten Councilors selected as provided for.

Sec. 2. All officers except Councilors shall be elected annually. The terms of Councilors shall be two years. Half of the membership of the Council shall be elected each year. The Secretary and the Treasurer shall be elected by the Council. The delegates present from each Councilor District shall meet prior to the last day of the Annual Session and elect the Councilor from that district. In the event of death, resignation or removal of any Councilor, the Council may appoint a successor to serve until the vacancy is filled at the next Annual Session. All of the officers shall serve until their successors are elected and installed.

ARTICLE VIII. FUNDS, EXPENSES AND BUDGET

Funds shall be raised by a per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates. Funds may also be raised in any other manner approved by the House of Delegates. The Council shall submit an annual budget to the House of Delegates. All resolutions providing for appropriations shall be referred to the Council and all appropriations approved by the Council shall be included in the annual budget.

ARTICLE IX. REFERENDUM

At any General Meeting of the Association it may, by a two thirds vote, order a general referendum upon any question pending before the House of Delegates. The House of Delegates may, by a vote of its members, submit any question to the membership of the Association for its vote. A majority vote of all members of the Association shall determine the question.

ARTICLE X. SEAL

The Association shall have a common seal. The power to change or renew the seal shall rest with the House of Delegates.

ARTICLE XI. AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates present and voting at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session and that it shall have been published twice during the year in the Journal of this Association or sent officially to each component society at least two months prior to the meeting at which final action is to be taken.

Bylaws

Chapter I. Membership

Section 1. Members of this Association shall be physicians whose names have been certified by secretaries of component societies to the Secretary of this Association that they are duly elected members of a component society and are legally qualified physicians practicing in Missouri except as otherwise provided. Each member must be of good moral and professional standing, and must not support, nor practice, nor claim to practice any exclusive system of medicine.

Sec. 2. No person who is under sentence of suspension or expulsion from any component society of this Association or whose name has been dropped from its roll of members shall be entitled to any of the rights or benefits of this Association.

Sec. 3. There shall be three classes of members as follow:

Active Members shall be limited to those members of component societies who (1) hold the degree of Doctor of Medicine or Bachelor of Medicine, and (2) if permitted by the bylaws of the component society, members who hold the degree of Doctor of Osteopathy, and (3) are entitled to exercise the rights of active membership in their component societies, as determined by their component societies, subject to the provisions of these Bylaws.

Junior members shall be limited to those members of component societies who are serving a full-time training internship or residency in a hospital approved by the American Medical Association and shall enjoy all of the privileges of active membership.

Honor members shall be limited to Honor members of component societies, which societies have requested that active members who have reached advanced years and have long served the Association and the profession be made Honor members of the Association. They shall enjoy all the privileges of active membership and shall be exempt from the payment of dues.

Sec. 4. **Associate members** shall be limited to persons not provided for in the various classes of membership who are engaged in the pursuit of a medical or allied science, and by action of the component societies, become Associate members of the Association. Associate members shall have the right to attend scientific sessions and such other privileges as may be extended to them by the House of Delegates. They shall not be eligible to vote and shall be exempt from the payment of dues.

Chapter II. General Meetings

Section 1. The General Meetings shall be open to all registered members and guests.

Sec. 2. Any paper read before this Association shall be considered for publication in the Journal if the Author so desires. Such papers may be given publication priority over regularly submitted papers but shall be subject to the same editorial review and selection policies.

Sec. 3. No person in the active practice of medicine in the State of Missouri shall appear on the program of the Association unless he or she is a member of the Missouri State Medical Association or an affiliated association or organization.

Chapter III. House of Delegates

Section 1. The House of Delegates shall meet annually at the time and place of the Annual Session. It shall remain in continuous session on the first day of the Annual Session and complete the work coming before it at that session.

All resolutions to be considered by the House of Delegates must be received at the Association office 45 days prior to the opening session of the House for publication in the handbook. Any resolution to be introduced after that time must be made available to the House of Delegates 24 hours before the session in which it is to be introduced. At least 200 copies of the resolution or funding for same must be supplied by the individual or society introducing the resolution.

At the second session of the House of Delegates, the same procedure would be followed, but such introduction would be allowed only if approved by two thirds of the delegates voting. It (The House of Delegates) shall meet on the last day of the annual session to receive the report of the Nominating Committee and complete unfinished business and the election of officers. The same procedure with regard to resolutions would be followed at that session, but it would then take a unanimous vote of the House to allow such introduction. At the discretion of the Speaker, these conditions would not apply for resolutions of good wishes, condolences, congratulations and others of a personal nature.

Sec. 2. Each component county society shall be entitled to send each year one delegate or one alternate to the House of Delegates for each fifty full paid members or fraction thereof in the Association on December 31 of the previous year, plus one addiional delegate or alternate for each one hundred nembers or a major fraction thereof; provided, iowever, that each component society which is composed of two or more county societies shall be entitled to at least one delegate from each of the counties of which it is composed; and provided that when two or more counties hereafter combine into a hyphenated society, such society shall not lose any lelegates by reason thereof; however, such delegates nust reside or practice in the county they represent. Alternate delegates may be elected from the entire nembership of the component medical societies. All Past-Presidents of the Association shall serve as Delegates-at-Large.

Sec. 2A. Each of the medical schools in the State f Missouri shall be entitled to send each year two student delegates, each from a different class, lected by the student body of the said medical school. The names of such student delegates shall be certified by the Dean of said medical school to he Secretary of this Association thirty days before he Annual Session. Such student delegates shall have all the rights and privileges of all other delegates.

Sec. 3. Forty delegates shall constitute a quorum of the House of Delegates. All meetings of the House of Delegates shall be open to members of the Association.

Sec. 4. From among members of the House of Delegates the Speaker shall appoint reference committees to which reports and resolutions, on a majority vote of the House of Delegates, shall be referred as follows:

Reference Committee on Amendments to the Constitution and Bylaws.

Reference Committee on Resolutions.

Reference Committee on Miscellaneous Affairs.

Reference Committee on Medical Education and Public Welfare.

Reference Committee on Reports of Officers.

The Speaker may appoint such other reference committees as he may deem necessary, upon approval of the House of Delegates.

The President shall appoint a Committee on Credentials.

Sec. 5. The House of Delegates shall elect delegates and alternates to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

Sec. 6. The House of Delegates shall divide the state into Councilor Districts specifying what counties each district shall include and, when the best interest of the Association and the profession will be promoted thereby, organize in each a district medical society of which all members of the component county societies shall be members.

Sec. 7. The House of Delegates shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates and may be present and participate in the debate on their reports.

Sec. 8. The House of Delegates shall receive and act upon a complete and detailed annual audit of receipts and expenses of the preceding year and a proposed budget for the current calendar year which shall have been prepared by the Council and submitted to the component county societies at least four weeks prior to the Annual Session. These shall be published in the Journal.

Sec. 9. The following shall be the general order of business of the House of Delegates for the first meeting of the session:

1. Call to order by the Speaker.
2. Report of the Committee on Credentials.
3. Roll call.
4. Reading and adoption of minutes.
5. Report of officers.
6. Report of committees.
7. Unfinished business.
8. New business.

The following shall be the general order of business of the House of Delegates for the last meeting of the session:

1. Call to order by the Speaker.
2. Report of the Committee on Credentials.
3. Roll call.
4. Reading and adoption of minutes.
5. Report of the Nominating Committee.
6. Election of officers.
7. Reports of officers.
8. Reports of committees.
9. Unfinished business.
10. New business (see Sec. 1, Chap. III).
11. Installation of officers.
12. President's appointments and installation of members to committees.
13. Selection of the place for the next Annual Session.

At any meeting of the House of Delegates, the order of business may be changed by a two thirds affirmative vote of the members present and voting.

CHAPTER IV. ELECTION OF OFFICERS

Section 1. The President on the first day of the Annual Session shall select a Committee on Nominations consisting of ten delegates, no two of whom shall be from the same Councilor District. The Committee on Nominations shall report the result of its deliberations to the House of Delegates in the form of a ticket containing the name of one member for each of the offices listed in Article VII of the Constitution which are to be filled at that Annual Session excepting the President-Elect who shall be nominated from the floor of the House of Delegates.

Sec. 2. All elections of officers shall be by acclamation unless ballot is called for. A majority of the votes cast shall be necessary to elect except for delegates and alternates to the American Medical Association, who shall be elected as follows:

In case no delegates or alternates for the American Medical Association receive on the first ballot a majority of the votes, the nominees shall be declared elected in the order of the highest number of votes received until the allotted number shall have been chosen. In case of a tie vote for delegate or alternate, the tie shall be determined by lot.

In case no nominee for general offices of the Association (see Article VII, Constitution) receives a majority of the votes on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken. This procedure shall be continued until one of the nominees receives a majority of all the votes cast, when he shall be declared elected.

Sec. 3. Nothing in this chapter shall be construed to prevent additional nominations being made from the floor by members of the House of Delegates.

Sec. 4. Delegates present at the Annual Session from Councilor Districts whose Councilors' terms expire shall hold meetings on or before the morning of the last day of the Annual Session and elect a Councilor for their District for a term of two years. The name of the elected Councilor shall be given on a prescribed form to the Secretary for presentation to the House of Delegates. Each candidate for Councilor must reside or practice in the district for which he is elected.

Sec. 5. The Speaker and Vice-Speaker shall not serve more than three consecutive terms.

Sec. 6. The Speaker shall appoint a parliamentarian to serve as such during the session of the House of Delegates at each Annual Session and upon whom the Speaker may call before deciding points of order or procedure.

CHAPTER V. DUTIES OF OFFICERS

Section 1. The **President,** or his designated representative, shall preside at all scientific sessions of the Association. He shall preside at the House of Delegates in the absence of the Speaker or Vice-Speaker and until their successors are elected. He shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such other duties as custom or parliamentary usage requires. He shall be the real head of the profession of the state and assist the Councilors in building up the county societies and in making their work more practical and useful.

Sec. 2. The **President** and the **President-Elect** shall be members of the Council and shall attend all meetings of the Council. Should the office of President-Elect become vacant through death or otherwise the Council may fill the vacancy until the next Annual Session of the Association.

Sec. 3. The **Vice-Presidents** shall assist the President in the discharge of his duties. In the event of the death, resignation or removal of the President the Council shall select one of the Vice-Presidents to serve the unexpired term.

Sec. 4. The **Treasurer** shall give bond in the sum of $20,000. He shall demand and receive all funds due the Association, together with bequests and donations. He shall pay money out of the treasury only on a written order of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his actions and of the state of the funds in his hands.

Sec. 5. The **Secretary** shall attend the General Meetings of the Association and the meetings of the House of Delegates, and shall keep minutes of their respective proceedings in separate record books. He shall be Secretary of the Council and shall keep a record of its proceedings. He shall be custodian of all record books and papers belonging to the Association, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the cooperation of the secretaries of the component societies, keep a card index register of all the legal practitioners of the state by counties, noting on each his status in relation to his county society, and shall transmit a copy of this list to the American Medical Association, transmitting to its Secretary each month a report containing the names of new members and the names of those dropped from the membership roster during the preceding month. He shall conduct the official correspondence, notifying members of meetings, officers of their election and committees of their appointment and duties. He shall employ such assistants as may be ordered by the Council and shall make an annual report to the House of Delegates. He shall supply all component societies with the necessary blanks for making their reports and shall collect from them the regular per capita dues and assessments and turn the same over to the Treasurer. The amount of his salary shall be fixed by the Council.

CHAPTER VI. COUNCIL

Section 1. The Council shall meet during the Annual Session at such times as necessity may require, subject to the call of the Chairman or on petition of three Councilors. It shall meet on the last day of the Annual Session to organize. The Council shall elect a Chairman and a Vice-Chairman for a term of one year. The Chairman may be reelected to serve not more than four consecutive terms of one year each. The Council shall, through its Chairman, make an annual report to the House of Delegates.

Sec. 2. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exists, for inquiring into the condition of the profession, and to keep in touch with the activities of and to aid in the betterment of the component societies of his district. He shall make reports of his work and the condition of the profession of each county in his district to the Council. The necessary traveling expenses incurred by each Councilor in the line of duties herein imposed may be allowed on a proper itemized statement submitted monthly and within the current year, but this shall not include his expense in attending the Annual Session of the Association. No Councilor shall be eligible for the position of Delegate to the House of Delegates during his term of office as Councilor, nor shall he vote in the House of Delegates.

Sec. 3. The Council shall be the executive body of the House of Delegates and between sessions shall exercise the power conferred on the House of Delegates by the Constitution and Bylaws.

Sec. 4. The District Councilor together with two members of component societies within the Council District, selected by the Councilor, shall serve as a Board to hear and by a majority vote adjudicate any questions involving the right and standing of members, either in relation to other members or to component societies or to the Association, and all matters of discipline affecting the conduct of members of component societies, or other matters.

The Council shall be the appellate Board of Censors of the Association. It shall hear and adjudicate all matters on appeal from the decision of the Councilor Board; it shall hear and adjudicate matters of an ethical nature brought before the House of Delegates or the general meeting which shall be referred to the Council without discussion. On original decision or appellate determination, its decision shall be final unless appealed to the then convened meeting or the next meeting of the House of Delegates.

Sec. 5. Charters shall be issued to county societies only on approval of the Council, and shall be signed by the President and Secretary of this Association. Upon the recommendation of the Council, the House of Delegates may revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and Bylaws.

Sec. 6. In sparsely settled sections the Council shall have authority to organize the physicians of two or more counties into societies, to be suitably designed so as to distinguish them from district societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

Sec. 7. The Council shall provide for and supervise the issuance of all publications of the Association including proceedings, transactions and memoirs, and shall have authority to appoint an Editor and such assistants as it deems necessary. It shall prescribe the methods of accounting and through a committee of three of its members, to be known as a Committee on Auditing and Appropriations, shall audit all accounts of this Association. The Council shall adopt an annual budget providing for the necessary expenses of the Association for the following calendar year. This budget shall be prepared and presented for consideration in the last quarter of each year by the Committee on Auditing and Appropriations. A complete and detailed report shall be submitted to the component county medical societies as provided in Section 8, Chapter III. The Council shall submit an annual report of the House of Delegates which shall specify the character and cost of the publications of the Association, the amount and character of all its property, and shall provide full information concerning the management of all affairs of the Association which the Council is charged to administer.

Sec. 8. The Council shall appoint at least six months before the Annual Session, a committee consisting of three of its members to be known as the Committee on Arrangements for the Annual Session. On recommendation of the Committee, the Council shall appoint a general chairman of a Local Committee on Arrangements, who shall be a member of the component society of the county in which the Annual Session is to be held, and who shall appoint and organize from the members of this county society the personnel of the Local Committee on Arrangements. The Local Committee on Arrangements shall provide suitable meeting places and shall have general charge of all local arrangements subject to the approval of the Committee on Arrangements for the Annual Session. All receipts and disbursements related to the Annual Session shall be handled by the Committee on Arrangements on recommendations of the Committee on Budget and Appropriations.

Sec. 9. The Council shall by appointment fill any vacancy in office not otherwise provided for which may occur during the interval between Annual Sessions of the House of Delegates; the appointee shall serve until his successor has been elected and has qualified.

Sec. 10. The salaries of all employees of the Association shall be fixed by the Council.

Sec. 11. The Council shall provide such headquarters for the Association as may be required to conduct its business properly.

Sec. 12. The Council shall be empowered to elect an Executive Secretary and Assistant Executive Secretary and such other personnel as may be necessary, who need not be members of the Missouri State Medical Association, each of whom shall perform such duties as the Council may designate and receive such salary and serve for such periods and under such conditions as the Council may determine.

CHAPTER VII. COMMITTEES AND COMMISSIONS

Section 1. Standing Committees of the Missouri State Medical Association, the chairman of which shall be appointed by the Association President unless otherwise provided in these Bylaws, will be as follows:

Executive Committee.
Committee on Constitution and Bylaws.
Committee on Publication.
Committee on Legislative Affairs.
Committee on Planning.
Committee on Voluntary Health Agencies.

The **Executive Committee** shall consist of the Association President, President-Elect, Secretary, Treasurer, Council Chairman and Council Vice-Chairman. The President of the Association shall be Chairman of the Executive Committee. The Executive Committee shall plan and execute such work as may be necessary for the welfare of the Association and the conduct of the Executive Secretary's Office between meetings of the Council, but shall be responsible at all times to the Council.

The Committee on **Constitution and Bylaws** shall consist of five members named by the President and shall propose such amendments to the Constitution and Bylaws as are deemed wise and expedient, and bring before the House of Delegates such amendments as it or other members of the Association may present for consideration. The President shall appoint one member for one year, two members for two years and two members for three years. As the term of each expires, his successor shall be appointed for a term of three years.

The Committee on **Publication** shall consist of five members and be appointed annually by the Council and shall be responsible for general publication and distribution policies of the Journal. The Editor of the Journal shall be designated by the Council and also shall serve as Chairman of the Committee on Publication. The Editor shall be empowered to nominate an Editorial Board, subject to approval by the Council. The members of the Editorial Board will assist the Editor in soliciting, preparing and reviewing material for publication in the Journal.

The Committee on **Legislative Affairs** shall consist of five members of the Association, appointed annually by the President. The Committee shall consider legislative proposals affecting health problems of the people of the state and the practice of medicine and shall make recommendations to the Council and the House of Delegates as well as directing staff activities in such matters.

The **Planning Committee** shall consist of ten members to be appointed by the President. Two members shall be appointed for one year, two for two years, two for three years, two for four years and two for five years. As the term of each expires, his successor shall be appointed for a term of five years. In making such appointments, the President shall be governed by experience of the member, the size of his medical society and his geographical area, so as to have a representative committee. Age of the members shall be considered to the end that one-third to one-half of the committee shall be of an age group that should contemplate ten to twenty years more of active practice.

The Committee on **Voluntary Health Agencies** shall consist of five members of the Association appointed by the President. Two members shall be appointed for three years, two members for two years and one member for one year. As the term of each expires, his successor shall be appointed for a term of three years. The Committee on Voluntary Health Agencies shall provide liaison and work with all voluntary health organizations.

Section 2. Standing Commissions of the Missouri State Medical Association, who shall be responsible to the Council and whose chaiman shall be appointed by the Association President, will be as follows:

Commission on Public Affairs.

Commission on Medical Economics, Third Party and Governmental Relations.

Commission on Continuing Education and Health Manpower.

Commission on Medical-Legal Affairs.

Commission on Interspecialty Medicine.

Subsection a. The standing Commissions, unless otherwise provided in these Bylaws, shall consist of fifteen members serving three-year terms and the terms will be staggered so that the President will appoint five members of each Commission each year. Initially, the President will appoint five members to one-year terms, five members to two-year terms and five members to three-year terms and no member shall serve more than two consecutive terms.

Subsection b. The Chairman of each Commission may appoint Ad Hoc Committees to carry out the Commission's programs. These Ad Hoc Committees may include any Missouri State Medical Association member.

Subsection c. The Chairman of the Council shall appoint each year an appropriate Councilor to serve as advisor to each respective Commission.

The Commission on **Public Affairs** shall plan and execute programs designed to enhance the relationship between the public and the medical profession. The Commission shall have responsibility in the fields of industrial health, environmental health, medicine and religion, trauma, disaster medical care and national defense and other public matters.

The Commission on **Medical Economics. Third Party Medicine and Governmental Relations** shall keep close liaison and work with peer and utilization review mechanisms, insurance intermediaries and governmental agencies.

The Commission on **Continuing Education and Health Manpower** shall determine the character and scope of the scientific proceedings of the Association for each annual session as well as to make all arrangements for such annual sessions, subject to the instructions of the House of Delegates. The Commission shall also be responsible for the entire continuing education program of the Association, shall have all matters pertaining to hospitals referred to it, shall carry on all programs in the recruitment of health manpower in professional as well as in allied health fields and shall be responsible for programs in the rural health field.

The Commission on **Medical-Legal Affairs** shall investigate and study medical-legal matters affecting the practice of medicine, make recommendations to the Council and House of Delegates and also make certain that all Association members are kept informed of important developments in this field. The Commission also may work with similar groups formed by the State Bar Association on matters of joint interest and concern as well as with governmental and insurance agencies in this field.

The Commission on **Interspecialty Medicine** shall be composed of one representative of each statewide specialty group as recognized by the Association Council. The President of the Missouri State Medical Association shall appoint annually to the Commission a representative from each of the authorized groups as submitted to him by the specialty organization. In the event that such a nominee is not submitted to him by an organization, the Association President may designate a member of that specialty group to serve on the Commission.

The Commission shall be charged with the responsibility of reviewing organization problems with respect to scientific programs, socio-economic and legislative matters that affect their particular specialties; in addition the Commission shall have the responsibility for programs and activities in fields relating to disease and health services involving the citizens of our state and such other matters as the Council shall direct. Also, the Commission shall provide close liaison between the various specialty organizations and the Missouri State Medical Association.

Section 3. Fifty percent of a Committee or a Commission should be present at an official meeting to constitute a quorum.

Section 4. Special committees may be appointed by the President or the Council as circumstances may demand.

CHAPTER VIII. DUES AND ASSESSMENTS

Section 1. (a) The annual dues of this Association shall be $65.00, which shall be applicable to each active member of the Association beginning in 1970 and shall be levied per capita on the active members of the component societies; the per capita levy for junior members shall be $10.00 per year; honor and associate members shall not be required to pay dues. Dues shall be payable on January 1 of the year for which they are levied.

(b) An assessment of $10.00 per year on each active member of the Association shall be applicable for a three-year period beginning in 1972. The assessment shall be payable with the dues of the Association, and the monies collected therefrom shall be remitted to the Missouri State Medical Foundation.

Sec. 2. Three dollars of the annual dues shall be credited to the account of the Journal for each member's annual subscription. The remainder of the amount shall be credited to the general fund of the Association.

Sec. 3. The House of Delegates may, when in its judgment the best interest of the Association demands, recommend an assessment on each active and junior member. Such assessment shall be levied only by consent of two thirds of the members of the House of Delegates present and voting. Funds obtained from such special assessments shall be allocated only for the purposes for which such assessment is levied and in accordance with substantiating budgets. Unexpended balances from such assessments must be reported to the House of Delegates for re-allocation.

Sec. 4. The secretary of each component society shall cause to be collected and remitted to the Treasurer of this Association the per capita levies. Any member whose name has not been reported for enrollment and whose dues have not been remitted to the Treasurer of this Association on or before March 1 shall stand suspended until his name is properly reported and his dues for the current year are paid. On December 31 of each year, members delinquent in payment of dues, and assessment if such has been made, or any part thereof shall, ipso facto, forfeit their memberships. No suspended member shall be eligible to register at an annual session.

Chapter IX. Rules of Conduct

The ethical principles governing the members of the American Medical Association shall govern members of this Association.

Chapter X. Rules of Order

The deliberations of this Association shall be conducted in accordance with parliamentary usage as defined in *Robert's Rules of Order*.

Chapter XI. County Societies

Section 1. All county societies now in affiliation with the State Association or those that may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and Bylaws shall, upon application to the Council, receive charters from this Association provided that their Constitutions and Bylaws shall have been submitted to the Council and received its approval.

Sec. 2. Only one component medical society shall be chartered in each county.

Sec. 3. Each county society shall judge of the qualifications of its members, subject to review and final decision by the Council of the State Association. Every reputable and legally qualified physician who does not practice, nor profess to practice sectarian medicine, and who resides or practices in the same county, who shall apply for membership on the prescribed form and subscribe for the Journal and pay the annual dues and assessments for the current year, shall be eligible for election to membership.

A member of a component society whose license has been revoked shall be dropped from membership automatically as of the date of revocation. The Council of the State Association shall have final authority to expel a member should a component county society fail to do so after being so requested by the Council.

The Council may upon request of a component society remit the state dues and assessment of a member who has become totally and permanently incapacitated through mental or physical disability and has been a member in good standing during the three consecutive years immediately preceding his disability; provided, that the component society shall remit the county society dues of such member.

The Council may, upon request of a component society, remit the state dues and assessments of a deserving member, found to fall within what is classified as a hardship case, during the period of said hardship until such time as the dues again become payable; provided that the component society shall remit the county society dues of such member.

The Council may, upon the request of a component society, waive the dues of any member in good standing for such a period as the member is serving in the Armed Forces of the United States of America, or similar service with any of the allies of the United States, and for six months thereafter.

A physician living near a county line may hold his membership in that county most convenient for him to attend, on permission of the component society in whose jurisdiction he resides.

Sec. 4. Any physician who may feel aggrieved by the action of the society of his county in suspending or expelling him shall have the right to appeal to the Council whose decision shall be final. A county society shall at all times be permitted to appeal or refer questions involving membership to the Council of the State Association for final determination.

Sec. 5. In hearing appeals the Council may admit oral or written evidence or both as in its judgment will most fairly present the facts.

Sec. 6. When a member in good standing in a component county society moves to another county in this state, he shall be given a written certificate of these facts by the secretary of his society, without cost, for transmission to the secretary of the society in the county to which he moves. Pending his acceptance or rejection by the society in the county to which he moves such member shall be considered to be in good standing in the county society from which he was certified and in the State Association to the end of the period for which his dues have been paid.

A member of a component society who moves to and engages in the practice of medicine at a location in another county in which there is a component society shall forfeit his membership in this Association and the Secretary shall remove his name from the roster of members of the Missouri State Medical Association unless within one year after such change of residence he becomes a member of the component society in the county to which he has moved.

Sec. 7. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it includes every eligible physician in the county.

Sec. 8. At some meeting in advance of the Annual Session of this Association, each component county society shall elect one or more delegates and an equal number of alternates therefor to represent it in the House of Delegates of this Association, in accordance with Chapter III, Section 2 of these Bylaws. The secretary of each county society shall send a list of such delegates and alternates to the Secretary of this Association at least sixty days before the Annual Session. Representation in the House of Delegates shall be contingent on compliance with the foregoing provisions.

Sec. 9. The secretary of each county society shall keep a roster of its members and, if practicable, a list of non-affiliated physicians, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this state, and such other information as may be deemed necessary by the Council. He shall send a copy of the program of each meeting to his district councilor and to the Secretary of the State Association.

Sec. 10. Any county component society, in a manner approved by the State Association, or the State Association with the consent of the county society or societies affected, may undertake, organize and put into effect plans for the medical care of indigent persons or indigent groups, and low income groups, by agreements with physicians, public officials or others and by the use of contributions, cooperative funds or other means; provided, however, that a free choice of the available and participating physicians in that territory shall be allowed to the patient and that all relationships, legal or otherwise, between the physician and the patient shall be and remain as though it were strictly an individual employment.

CHAPTER XII. AMENDMENTS

Section 1. These Bylaws may be amended at any Annual Session by a two-thirds vote of the delegates present and voting at that session, if the proposed amendment has been properly submitted to the House of Delegates and has laid on the table for one day.

Sec. 2. Upon the adoption of this Constitution and these Bylaws all previous constitutions and bylaws are thereby repealed.

Goldman, Stanley L., 7546 Troost Ave. 64131
Goldsich, Edward, 315 Nichols Rd. 64112
Goldstein, Marvin F., 415 E. 63rd St. 64110
Goodson, William H., Jr., 2929 Baltimore 64108
Goolshee, Robert L., 44th & Wornall Rd. 64111
Gordon, Morris P., 8300 Troost 64131
Gottsch, Joseph C., Suite 420, 2929 Baltimore Ave. 64108
Gowdamarajan, Rengasamy, 825 Euclid 64124
Grahowski, Marie H., 24th at Gillham Rd. 64108
Grabske, Charles F., 1224 W. 36th, Independence 64055
Grahske, Charles F., Jr., 10612 E. 18th, Suite #1, Independence 64052
Graham, Patrick G., 4320 Wornall Rd. 64111
Graham, Wallace H., 1815 E. 63rd St. 64130
Green, J. Richard, 17221 E. 23rd, Independence 64057
Greene, W. Wallace, 4320 Wornall Rd. 64111
Gregory, Ralph W., 4620 Nichols Parkway 64112
Griffin, Donald R., 8728 Catalina Dr., Shawnee Mission, Kan. 66207
Griffith, John A., Jr., 4320 Wornall Rd. 64111
Growdon, John A., 4620 J. C. Nichols Parkway 64112
Grunt, Jerome A., 24th & Gillham Rd. 64108
Guastello, Mario J., 4320 Wornall Rd. 64111
Gullett, Charles C., Administration Center 64153
Gundle, Sigmund, 751 E. 63rd St. 64110
Gunn, Richard W., Professional Bldg. 64106
Gupta, B. S. N., 600 E. 22nd 64108
Gustofson, Jon E., 1509 West Truman Rd., Independence 64050
Haas, Harry D., 4320 Wornall Rd. 64111
Habih, Henry N., 440 E. 74th Terr. 64131
Hagar, David L., 9406 E. 63rd St. 64133
Hahn, Frederick W., Jr., 4240 Blue Ridge Blvd. 64133
Haight, John M., 3401 E. 12th Blvd. 64127
Haith, Edward E., 751 E. 63rd St. 64110
Haith, Walter F., 2701 E. 31st St. 64128
Hall, Ralph R., St. Luke's Hosp. 64111
Hall, Robert T., 24th & Gillham Rd. 64108
Hall, Thomas B., P. O. Box 16, Arrow Rock 65320
Halperin, Phillip H., 601 E. 63rd St. 64110
Hamill, Robert W., 4320 Wornall Rd. 64111
Hanson, Karl H., Jr., 4320 Wornall Rd. 64111
Hardacre, Ruth A., 3300 Charlotte St. 64109
Hardy, Henry M., 6606 Overhill Rd., Shawnee Mission, Kan. 66208
Hardy, John W., Professional Bldg. 64106
Harless, Morris S., 4320 Wornall Rd. 64111
Harlow, Lloyd M., 2462 Brooklyn St. 64127
Harned, Bert W., 1065 Wyckford Rd., Olathe, Kan. 66061
Harrin, William R., 4320 Wornall Rd. 64111
Hart, Lawrence W., 6301 Rockhill Rd. 64131
Hartwig, Frederick H., 6400 Prospect 64132
Hartwig, Raymond W., 3110 Tomahawk, Shawnee Mission, Kan. 66208
Hausheer, Herman J., 1612 W. Truman Rd., Independence 64050
Haynes, Solon E., 2727 Main St. 64108
Hazen, Robert M., 6400 Prospect 64132
Heilman, Edward J., 6700 Troost 64131
Hellerstein, Stanley, 24th & Gillham Rd. 64108
Helman, Richard G., 7721 State Line 64114
Henry, Clarke L., 4320 Wornall Rd. 64111
Herdoiza, Alfonso W., 751 E. 63rd 64110
Herman, Edwin M., 701 E. 63rd 64110
Herrman, George V., 10855 State Line, Apt. 6 64114
Hervey, Wm. H., II, Wornall Rd. at 44th 64111
Hihbard, Blaine Z., 4320 Wornall Rd. 64111
Hickerson, William H., 604 W. Maple Ave., Independence 64050
Higgins, Ronald A., 6400 Prospect 64132
Hill, Jack H., Trinity Lutheran Hosp. 64108
Hink, Frederick W., 10229 Independence Rd., Independence 64054
Hirsch, Joe E., 4643 Wyandotte St. 64112
Hoadley, William D., 6400 Prospect 64132
Hodgson, Frank H., 4301 Main St. 64111
Hoech, George P., Jr., 6400 Prospect 64132
Hoeper, Samuel D., 12921 Grandview Rd., Grandview 64030
Hoffman, Jacob S., 751 E. 63rd St. 64110
Hoffmann, Alan L., 1734 E. 63rd 64110
Hoffman, Lee Martha, 4914 Belinder Rd., Shawnee Mission, Kan. 66205
Hogan, Daniel F., 9 F Resosaca Apt., Fort Brown, Brownsville, Tex. 78520
Hogue, Frank S., 4320 Wornall Rd. 64111
Holder, Thomas M., 4320 Wornall Rd. 64111
Hollinger, Lloyd A., 6700 Troost 64131
Hollweg, Kenneth C., 4320 Wornall Rd. 64111
Holt, Waldo S., 4620 Nichols Parkway 64112
Holton, Edward B., 10901 Winner Rd., Independence 64052
Hook, Waller C., 10010 El Monte, Shawnee Mission, Kan. 66207
Hopkins, James P., 6700 Troost 64131
Hornstra, Robijn K., 600 E. 22nd St. 64108
Huet, Raul, 2625 W. Paseo 64108
Hughes, Michael F., 305 W. 43rd 64111
Hungate, Carroll P., Professional Bldg. 64106
Hunkeler, John D., 2929 Baltimore 64108
Hunt, Thomas R., 6400 Prospect 64132
Hunter, Martin P., 4706 Broadway 64112
Hunzicker, Warren J., P. O. Box 139, 64141
Hurwitt, Frank, 7801 Holmes 64131
Huse, William J., 2929 Baltimore 64108
Hyde, Lawrence L., 2929 Baltimore 64108
Ingham, Walton C., 4320 Wornall Rd. 64111
Irvine, John W., 9503 E. 63rd St. 64133
Irwig, Fred, 4706 Broadway 64112
Jackson, Haywood R., 3317 E. 43rd St. 64130
Jacob, Walter P., 601 E. 63rd St. 64110
Jacohs, Morton, 6314 Brookside Plaza 64113
Jacohs, Walter H., 601 E. 63rd St. 64110
James, Otis E., Jr., 6306 Morningside Dr. 64113
Janes, Donald R., 4320 Wornall Rd. 64111
Jansen, Robert. 440 E. 66th 64131
Jayaram, M. R., 6100 Martway, Shawnee Mission, Kans. 66202
Jenah, Morteza, 6700 Troost 64131
Jennett, J. Harvey, Professional Bldg. 64106
Johnson, C. Laurence, Suite 525, 2929 Baltimore Ave., 64108
Johnson, Dallas A., 6700 Troost 64131
Johnson, Edgar W., Jr., 8919 Pawnee La., Shawnee Mission, Kan. 66206
Johnson, Gareth R. P., 5107 Spring 64133
Johnson, James S., 4301 Cleveland 64130
Johnson, Joseph E., 11201 Colorado 64137
Johnson, Richard L., 6400 Prospect 64132
Johnson, Thomas M., 4620 J. C. Nichols Parkway 64112
Johnstone, Paul N., Bryant Bldg. 64106
Jonas, Harry S., Jr., 2116 S. Sterling Ave. Independence 64052
Jones, Gale O., 6400 Prospect 64132
Jones, Marion E., 2462 Brooklyn St. 64127
Jones, Samuel T., III, 4620 Nichols Parkway 64112
Jones, T. Reid, 411 Nichols Rd. 64112
Justus, John B., Plaza Parkway Bldg. 64112
Kahn, Marvin, 601 E. 63rd 64110
Kanarek, Joseph, 601 E. 63rd St. 64110
Kandt, Ray E., Jr., 6700 Troost 64131
Kantor, Julius M., 601 E. 63rd 64110
Kantor, Samuel, 6700 Troost 64131
Kartus, Irving, 9120 Ward Parkway Terr. 64114
Katf, Nicola Y., 2800 Hospital 64116
Kaufman, Andrew B., 340 Rockhill Medical Bldg. 64131
Kaufmann, Herbert H., 701 E. 63rd St. 64110
Kaul, Philip G., 4320 Wornall Rd., 64111
Kay, Billy F., 4320 Wornall Rd. 64111
Kayanan, Jose C., 2929 Baltimore 64108
Keeler, James E., 4320 Wornall Rd. 64111
Keitges, Pierre W., 39th & Rainbow Blvd., Kansas City, Kan. 66103
Kelling, Douglas G., 6817 E. 37th 64129
Kelly, Joseph G., 9406 E. 63rd 64133
Keltner, Raymond O., 4320 Wornall Rd. 64111
Kendall, Charles A., 4240 Blue Ridge Blvd. 64133
Kendall, Forrest H., 2505 W. 71st, Prairie Village, Kan. 66208
Kennard, George K., 4320 Wornall Rd. 64111
Kent, Bela K., 701 E. 63rd St. 64110
Kernodle, Jefferson D., Box 2778 64142
Ketterman, Grace H., 225 W. 43rd St. 64111
Ketterman, Herbert L., 11201 Colorado 64137
Kettner, Edward G., 1102 Grand Ave. 64106
Kienberger, Paul A., 10605 E. 35th Terr., Independence 64052
Kiene, Richard H., 4320 Wornall Rd. 64111
Killen, Duncan A., 4320 Wornall Rd. 64111
Kimball, Merritt H., Suite 350, 2929 Baltimore Ave. 64108
Kimble, Harvey S., Wornall Rd. at 44th 64111
Kindred, Lynn H., 4320 Wornall Rd. 64111
King, J. Tenhrook, 4320 Wornall Rd. 64111
King, Walter R., Professional Bldg. 64106
Kingsbury, Helen, 6415 Sagamore Rd., Shawnee Mission, Kan. 66208
Kitchen, William M., Suite 340, 2929 Baltimore Ave. 64108
Klein, Edward H., 7011 Roe Ave., Prairie Village, Kan. 66208
Knight, John S., 2900 W. 53rd, Shawnee Mission, Kan. 66205
Knight, Lyle B., 108 Madison, Lee's Summit 64063
Knoch, H. Kermit, Plaza Parkway Bldg. 64112
Koontz, Paul G., 4320 Wornall Rd. 64111
Korth, William M., 6300 Midnight Pass Rd., Villa 16, Siesta Key, Sarasota, Fla. 33581
Kraft, Jacob, 6700 Troost 64131
Kranson, Seymour J., 11200 Winner Rd.. Independence 64052
Kuhn, William F., II, 6247 Brookside Blvd. 64113
Kurtz, Karl J., 4320 Wornall Rd. 64111
Kuruvilla, George, 400 E. Red Bridge Rd. 64131
Kyger, John E., 3612 Blue Ridge, Independence 64052
Lally, James J., 4620 Nichols Parkway 64112
Lamar, Robert F., Professional Bldg. 64106
Lambert, L. Marian, 701 E. 63rd 64110
Lamhie, Rodger W., 701 E. 63rd St. 64110
Lampton, Lawrence M., 5516 Westover Rd. 64113
Landers, Burnell, 6400 Prospect 64132
Landis, George K., Professional Bldg. 64106
Lapi, Angelo, 2012 Stratford Rd., Shawnee Mission, Kan. 66208
Lapp, Harry C., 221 West 51st 64112
Latham, Raymond W., 4620 Nichols Parkway 64112
Lauer, Daniel J., 4320 Wornall Rd. 64111
Layle, John K., Jr., 4320 Wornall Rd. 64111
Layton, Ira C., 6400 Prospect 64132
Lee, Gerald B., 101 Memorial Dr. 64108
Lee, Henry A., 6700 Troost 64131
Lee, King Ying, 6700 Troost 64131
Lee, Tae Hung, 6400 Prospect 64132
Lehner, Richard L., Professional Bldg. 64106
Leifer, William W., 701 E. 63rd St. 64110
Leitch, Cecil G., 808 S. 15th St., Blue Springs 64015
Lentz, Clark H., BMA Tower 64141
Leo, William A., 6400 Prospect 64132
Leonidas, John C., 24th & Gillham Rd. 64108
Levey, Harry B., 601 E. 63rd St. 64110
Lewis, Revis C., Suite 425, 2929 Baltimore Ave. 64108
Liang, Jing C., 17221 E. 23rd, Independence 64057
Lichtor, Alexander, 751 E. 63rd St. 64110
Lichtor, Joseph M., 601 E. 63rd St. 64110
Lieberman, B. Albert, Jr., 4620 Nichols Parkway 64112
Lila, Aram, 1509 W. Truman Rd., Independence 64050
Lindgren, Carleton J., 4240 Blue Ridge Blvd. 64133
Lindquist, Carl N., Route 4, Box 150, Reeds Spring 65737
Link, Vance E., 1201 W. 36th St., Independence 64050
Linville, Howard E., 6700 Troost 64131
Lloyd, Ivan E., 1 Penn Valley Park 64141
Lohrentz, Lois H., 2800 W. 50th Terr., Shawnee Mission, Kan. 66205
Long, R. Stacy, 6400 Prospect 64132
Lorenzo, E., 1820 W. 91st Pl. 64114
Lotito, Carlos A., 701 E. 63rd 64110
Loutzenhiser, James K., 6400 Prospect 64132
Lowell, Paul, 4742 Liberty St. 64112
Lundgren, Fred H., Jr., Bendix Corp. Medical Dept., Box 1159, 64141
Lyddon, Harold R., Jr., 75th & Troost 64131

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* Doctor of Osteopathy.

Lytton, George J., 411 Nichols Rd. 64112
McAfee, R. Gordon, 6400 Prospect 64132
McCalla, John P., 649 Huntington Rd., 64113
McCallister, Ben D., 4320 Wornall Rd. 64111
McCanse, Andrew, 24th and Cherry 64108
McClanahan, Robert C., 1102 Grand Ave. 64106
McConahay, David R., 4320 Wornall Rd. 64111
McConchie, James E., 10901 Winner Rd., Independence 64052
McCoy, Frederick J., 4177 Broadway 64111
McCray, Glen M., 1710 Independence Ave. 64106
McCubbin, Clarence R., 8612 Meadow La., Leawood, Kan. 66206
McCullough, Campbell C., Argyle Bldg. 64106
McDonnell, John F., 4320 Wornall Rd. 64111
McFarland, H. Richard, 4320 Wornall Rd. 64111
McFarland, M. Donald, 4320 Wornall Rd. 64111
McGannon, Paul T., 6400 Prospect 64132
McGuire, Thomas H., 4320 Wornall Rd. 64111
McIntosh, Donald E., 6400 Prospect 64132
McIntyre, John D., 4948 Westwood Rd. 64112
McKee, Wallace P., 4320 Wornall Rd. 64111
McKeel, Thomas B., 180 Doctor's Bldg., E. 64110
McLeod, John, 9 E. 67th St. 64113
McMillan, Thomas E., 6400 Prospect 64132
McNabney, W. Kendall, 24th & Cherry Sts. 64108
McNutt, Theodore L., 11201 Colorado 64137
McVay, James R., V.F.W. Bldg. 64111
McWherter, Lottie B., 9206 W. 72nd St., Shawnee Mission, Kan. 66204
Maben, Sam Edward. 9406 E. 63rd 64133
MacGee, Edwin E., 4320 Wornall Rd. 64111
MacInnis, Florence E., 4620 Nichols Parkway 64112
MacNaughton, Ralph E., St. Joseph's Hosp. 64128
MacNaughton, Robert A., 3208 W. 101st St., Leawood, Kan. 66206
Mallouk. Alexander G., 4320 Wornall Rd. 64111
Mangels, Kenneth A., 1212 W. Truman Rd., Independence 64050
Manuel, Louis C., 4900 Swope Parkway 64130
Markel, Larry G., 4320 Wornall Rd. 64111
Marks, Mark M., 751 E. 63rd St. 64110
Marsh. Alice, Pleasant Hill 64080
Marshall, Cameron F., 5510 Belinder Rd., Shawnee Mission, Kan. 66205
Marshall. Hal E., 4949 Rockhill Rd. 64110
Martin. Clyde V., 800 W. 47th St. 64112
Martz. Bill L., 2220 Holmes 64108
Mason, Wayne E., 6700 Troost 64131
Masterson, Bryon J., 4320 Wornall Rd. 64111
Masucci, Joseph M., Argyle Bldg. 64106
Mayer. John H., Jr., Plaza Parkway Bldg., 64112
Mayer, John H., III, 4620 J. C. Nichols Parkway 64112
Medina-Lorenzo, Remedios, 911 Michigan 64127
Medlicott, William J., 4320 Wornall Rd. 64111
Meegan, Robert J., 2929 Baltimore 64108
Mehta. Satish K., Jackson Co. Public Hospital. Rt. 17 64139
Melgaard, S. Ross, 6601 Rockhill Rd. 64131
Meriwether, Don R., 5109 W. 60th Terr., Mission, Kan. 66205
Merveille, Octave C., 24th & Gillham Rd. 64108
Metzl, Kurt, 601 E. 63rd 64110
Meyer, Paul W., 4320 Wornall Rd. 64111
Meyers, Harold L., 601 E. 63rd St. 64110
Miciano, Ruel T., 8434 E. 56th St. Terr. 64129
Miles, George O., 4320 Wornall Rd. 64111
Milgram, Byron A., 601 E. 63rd 64110
Miller, Clint L., 615 W. 3rd St., Lee's Summit 64063
Miller, Gerald L., 2929 Baltimore 64108
Miller, Max I., Suite 350, 2929 Baltimore 64108
Miller, Wilson H., 4620 Nichols Parkway 64112
Minnigerode, Turner L., 2304 E. Meyer Blvd. 64132
Mitchell, Andrew D., 4320 Wornall Rd. 64111
Mitchell, John D., 2989 Main 64108
Mitchell, Robert H., Bryant Bldg. 64106
Mitra, Nirmal K., 112th Terr. & Grandview Rd. 64134
Mixson, William C., 4320 Wornall Rd. 64111
Montello, Samuel A., 4320 Wornall Rd. 64111
Mooney, Justin L., 6740 W. 52nd Pl., Shawnee Mission, Kan. 66202
Mooney, Marcel L., 751 E. 63rd St. 64110
Moore, Robert A., Box 679 64141
Moreano, Armando H., 4301 Main St. 64111
Morest. F. Stanley. 1001 Egret Ct., Dunedin, Fla. 33528
Morgan, David B., 4620 Nichols Parkway 64112
Morley, Louise A., 4907 Neosho, Shawnee Mission, Kan. 66205
Morris, Joseph H., Jr., 4240 Blue Ridge Blvd. 64133
Morrison, Donald H., 7500 W. 95th, Shawnee Mission, Kan. 66201
Morison. J. Scott, 424 Nicholas Rd. 64112
Mosbacher, Hugh E., 16509 E. 32nd, Independence 64055
Moss, Paul, 4706 Broadway 64112
Mosser, Robert S., 8342 Carter, Overland Park, Kan. 66212
Mueller, Martin J., 6400 Prospect 64132
Mullen, Leo M., 4443 Paseo Blvd. 64110
Mundy, William L., 4635 Wyandotte St. 64112
Murphy, James J., 8306 Jarboe 64114
Murphy, Robert J., 4320 Wornall Rd. 64111
Murray, W. Lee, 11201 Colorado 64137
Muth, Robert G., 6400 Prospect 64132
Myers, John S., 618 Professional Bldg. 64106
Myers, Robert M., 906 Grand Ave. 64106
Naime, Mansour J., 6700 Troost 64131
Nelson, Bentley A., 305 W. 43rd St. 64111
Nesselrode, John H., 10901 Winner Rd., Independence 64052
Neumann, James W., 2929 Baltimore 64108
Newman, Robert L., Wornall Rd. at 44th 64111
Nickson, Charles E., Jr., 10901 Winner Rd., Independence 64052
Nigro, E. Robert, 700 E. 8th 64106
Nigro. Joseph A., 4740 Roanoke, 64112
Noback, Richardson K., 2200 Holmes 64108
Noltensmeyer, Milton N., Suite 350, 2929 Baltimore Ave. 64108
Novak, Edward J., 3011 Baltimore 64109
O'Farrell. Thomas P., 6400 Prospect 64132
Ogilvie, John H., Box 157, Route 1, Gravois Mills 65037
O'Hearne, John J., 4706 Broadway 64112
O'Kell, Richard T., Wornall Rd. at 44th St. 64111
O'Malley, James F., 6700 Troost 64131
O'Neil, James H., 4706 Broadway 64112
Osborne, Jere O., 644 W. 69th Terr. 64113
Ost, Mark D., 6601 Rockhill Rd. 64131
Overesch, Harry B., 6400 Prospect 64132
Owens, James L., 920 W. 47th 64112
Owens, Richard L., 6233 Summit 64113
Owens, Robert H., 6700 Troost 64131
Ozar, Milton B., 6700 Troost 64131
Padfield, Earl G., Jr., 4320 Wornall Rd. 64111
Pakula, Sidney F., 24th & Gillham Rd. 64108
Parelman, Allen G., 601 E. 63rd St. 64110
Parker, Hubert M., Suite 435, 2929 Baltimore Ave. 64108
Parsons, Eugene O., 145th & State Line, Stilwell, Kan. 66085
Pawsat, John E., 4320 Wornall Rd. 64111
Pearson, Paul E., 102 E. 51st 64112
Peete, Don C., Professional Bldg. 64106
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Perll, Maurice F., 6700 Troost 64131
Perll, Rita D., 830 W. 61st Terr. 64113
Perry, Ralph, 6400 Prospect 64132
Petersen. Eugene G., 104 Hackberry, Lee's Summit 64063
Peterson, Bonita J., 31st and Wyandotte Sts. 64108
Peterson, Carl M., 2701 E. 31st St. 64128
Peterson, George L., 315 Nichols Rd. 64112
Peterson, Milton C., 10519 Tropicana Circle, Sun City, Ariz. 85351
Peterson, Walter R., 2701 E. 31st St. 64128
Petry, Ezra L., 13740 W. 90th Pl., Lenexa, Kans. 66215
Pfuetze, Edwin L., Plaza Parkway Bldg. 64112
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Piepergerdes, Larry G., 434 Blue Ridge Tower, 4240 Blue Ridge Blvd. 64133
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Pinsker, Oscar T., 751 E. 63rd St. 64110
Piper, Donald K., 6700 Troost 64131
Pipkin, Garrett F., 1400 N. Woodlawn, Wichita, Kan. 67208
Polk, George M., 10315 Corte Del Sol, Sun City, Ariz. 85351
Pollock. Leo H., 751 E. 63rd St. 64110
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Potts, Donald A., 110 E. 23rd St., Independence 64050
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Preston, Albert, Jr., 4320 Wornall Rd. 64111
Printz, Joseph H., 601 E. 63rd St. 64110
Printz, Otto J., 601 E. 63rd St. 64110
Pucci, Gregory L., 411 Nichols Rd. 64112
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Quistgard, Paul C., Star Route, Box 63, Hollister 65672
Racela. Antonio S., Jr., Linwood at Prospect 64128
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Raich, Robert A., 4320 Wornall Rd. 64111
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Reed, Wm. A., 4320 Wornall Rd. 64111
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Reister. Dorothy D., 5201 W. 84th, Shawnee Mission, Kan. 66207
Reister. Philip D., 701 E. 63rd 64110
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Reynolds, Clarence C., 3842 E. 63rd Terr. 64130
Rhoades, Arthur B., 111th & Antioch Rd., Lenexa, Kan. 66210
Ricci, Walter F., 425 E. 63rd 64110
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Riller, Lowell E., Professional Bldg. 64106
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Rippey, John H., Wornall Rd. at 44th 64111
Roberts, Grosvenor G., 777 N. Blue Parkway, Lee's Summit 64063
Roberts, Harold M., 1005 Brentwood Circle 64112
Robinett, Wade V., 6700 Troost 64131
Robinson, Arthur W., 4320 Wornall Rd. 64111
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Robinson, William J., 601 E. 63rd St. 64110
Rodgers, George H., 10041 El Monte Lane, Overland Park, Kan. 66207
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Russell, James L., Suite 420, 2929 Baltimore Ave. 64108
Russell, Robert K., 63rd & Evanston, Raytown 64133
Sabates, Felix N., 6700 Troost 64131
Saferstein, A. Lester, 6859 Cherry 64131
Saladino, Anthony, 2009 W. 67th, Shawnee Mission, Kan. 66208

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Samuelson, Edward A., 4620 Nichols Parkway 64112
Sanders, Donald C., 411 Nichols Rd. 64112
Sanders, Harmon U., Jr., 115 Humphrey, Greenwood, Miss. 38930
Sanders, William F., 411 Nichols Rd. 64112
Sandow, Theodore L., Jr., 4320 Wornall Rd. 64111
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Schutz, Carl B., 841 San Pablo Dr., San Marcos, Calif. 92069
Schutz, Richard B., 411 Nichols Rd. 64112
Seely, Clark W., 3000 W. 68th, Shawnee Mission, Kan. 66208
Seiden, Gerald D., 751 E. 63rd 64110
Sells, Kenneth J., Suite 310, 2929 Baltimore Ave. 64108
Shalet, Malcolm F., 425 E. 63rd St. 64110
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Sirridge, Wm. T., 24th & Cherry 64108
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Smith, O. D., 5400 W. 83rd., Prairie Village, Kan. 66208
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Smull, Ned W., 2318 W. 70th Terr. Shawnee Mission, Kan. 66208
Sneid, Philip, 701 E. 63rd St. 64110
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Sprinz, Helmuth, 24th & Cherry 64108
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Stacey, Wallace R., 2116 S. Sterling Ave., Independence 64052
Staggs, William A., Suite 335, 2929 Baltimore Ave. 64108
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Stanley, John H., 6301 Rockhill Rd. 64131
Statland, Harry, 601 E. 63rd St. 64110
Statland, Morris, 601 E. 63rd St. 64110
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Stockwell, A. Lloyd, 24th & Cherry 64108
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Stratemeier, Edward H., 31st & Wyandotte 64108
Strauss, Carl F., 8300 Troost 64131
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Suddarth, Sterling B., 4240 Blue Ridge Blvd. 64133
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Suseela, Dasari, 2310 E. Linwood Blvd. 64109
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Swisher. Robert C., 2209 Ptarmigan Dr. #4, Walnut Creek, Calif. 94595
Switzer, Clyde, 8100 W. 54th Terr., Overland Park, Kan. 66202
Sword, Richard O., 800 W. 47th St. 64110
Szabados, Ernest D., 1612 W. Truman Rd., Independence 64050
Tamblyn, Claire L., 6400 Prospect 64132
Tarson, Solomon S., 5511 W. 85th St., Overland Park, Kan. 66207
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Tiojanco, Reynaldo R., 1102-130th, Grandview 64030
Totten, Frederick E., 6700 Troost 64131
Toubes, Daniel B., 8300 Troost 64131
Trimble, George X., 101 Memorial Dr. 64108
Troeh, Melvin R., 10901 Winner Rd., Independence 64052
Trowbridge, Barnard C., 415 E. 63rd St. 64110
Trowbridge, Ellsworth H., Jr., 411 Nichols Rd. 64112
Tuohy, Gerald F., 9725 Shepherd's Dr. 64131
Turner, Ronald M., 10901 Winner Rd., Independence 64052
Tutera, Dominic F., Plaza Medical Bldg. 64112
Tuthill, Herbert, 1037 W. 71st Terr. 64114
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Underwood, Johnson, Jr., Professional Bldg. 64106
Unger, Harold, 601 E. 63rd 64110
Upsher, Albert E., Box 2778, 64106
Valins, Eugene, 1815 E. 63rd. 64130
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Van Buskirk, William C., 6700 Troost 64131
Van Thullenar, Philip A., 4949 Rockhill Rd. 64110
Vaughn, James W., 2625 W. Paseo 64108
Vera, Enrique, 425 E. 63rd 64110
Vermeire, David A., Wornall Rd. at 44th 64111
Vidals, Victor G., 7540 Troost 64131
Vincent, Jack C., 8300 Troost 64131
Virden, Herbert H., 6700 Troost 64131
Viril, Leonardo C., 4706 Broadway 64112
Vogel, Arthur P., 6400 Prospect 64132
Volk, George E., 6700 Troost 64131
Voth, Harold W., 4320 Wornall Rd. 64111
Wade, Frederick E., Professional Bldg. 64106
Wagner, Paul J., Suite 350, 2929 Baltimore Ave. 64108
Wakefield, Franklin H., 13065-100th Dr., Sun City, Ariz. 85351
Walker, James C., 2727 Main 64108
Walker, John W., 6400 Prospect 64132
Walker, Orville C., Jr., 10901 Winner Rd. Independence 64052
Wall, Harry C., 751 E. 63rd St. 64110
Wall, Leonard A., 4320 Wornall Rd. 64111
Waltz, Charles A., 534 Blue Ridge Tower 64133
Waltz, James R., 4240 Blue Ridge Blvd. 64133
*Wang, George Y. M., 600 E. 22nd 64108
Wathanacharoen, Suchint, 4320 Wornall Rd. 64111
Watson, Ethel, 1033 W. Maple Ave., Independence 64050
Waxman, Herbert J., 8300 Troost 64131
Waxman, Jane Z., 4840 Prospect 64130
Webb, Harry E., 330 W. 47th St. 64112
Weidmaier, Edward J., 2929 Baltimore 64108
Weiford, Edward C., 4320 Wornall Rd. 64111
Weir, Robert K., 4240 Blue Ridge Blvd. 64133
Weller, Lynn D., Jr., 6700 Troost 64131
Wells, Donald E., Meyer Blvd. at Prospect 64132
Wells, James A., 3717 Bell 64111
Wells, John H., 3325 Prospect 64128
Wenner, Herbert A., 1710 Independence Ave. 64106
Wheeler, Charles B., 830 W. 53rd 64111
Wheeler, John H., 4320 Wornall Rd. 64111
White, Charles H., 6700 Troost 64131
White, George A., 3416 Paseo Blvd. 64109
White, James S., 751 E. 63rd 64110
White, Stoughton F., 4320 Wornall Rd. 64111
White, William E., 6400 Prospect 64132
Whiteman, John R., Suite 545, 2929 Baltimore Ave. 64108
Whitman, Doyle C., 6836 Cherokee La., Shawnee Mission, Kan. 66208
Whitmore, J. Stewart, Suite 340, 2929 Baltimore Ave. 64108
Whittaker, Charles K., 4320 Wornall Rd. 64111
Whitten, John S., 2116 Sterling, Independence 64052
Wicks, Edwin O., 414 E. 12th 64106
Wien, Irving A., 1103 Grand 64106
Wilber, Robert D., 4320 Wornall Rd. 64111
Wilhelm, Warren F., 6400 Prospect 64132
Wilkinson, Charles B., 4604 Benton Blvd. 64130
Wilkinson, Everett A., 6400 Prospect 64132
Williams, Frank R., 4320 Wornall Rd. 64111
Williams, George P., 10928 Hillcrest 64134
Williams, Joseph C., Jr., 6400 Prospect 64132
Williams, Roland D., 305 W. 43rd St. 64111
Williams, Starks J., 5600 Agnes 64130
Willits, Lyle G., 1224 West 62nd 64113
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Willoughby, Jean B., 6400 Prospect 64132
Wilson, Clifford C., 4320 Wornall Rd. 64111
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Winer, Nathaniel, 4949 Rockhill Rd. 64110
Winkelman, Esther B., 6400 Prospect 64132
Winston, Bernard H., 601 E. 63rd St. 64110
Wise, George W., 24th & Gillham Rd. 64108
Wise, Morris F., 6700 Troost 64131
Withers, Orval R., Plaza Parkway Bldg. 64112
Woehl, Joseph J., 620 Medical Plaza 64111
Wolf, Jack W., 425 E. 63rd St. 64110
Woodman, Grey M., 2200 McCoy St. 64108
Woods, Harold V., 1405 W. 40 Hwy., Blue Springs 64015
Woods, S. Dwight, 4320 Wornall Rd. 64111
Woods, Walton C., Medical Dept. TWA, Midcontinent Intl. Airport 64153
Woodward, William W., 3537 Broadway 64141
Wortmann, Robert F., 6400 Prospect 64132
Wright, R. Paul, Professional Bldg. 64106
Wu, Shuh-Min, 425 E. 63rd St. 64110
Wu, William Q., 6700 Troost 64131
Wurster, Jerry B., 4320 Wornall Rd. 64111
Wurster, W. Joel, 305 W. 43rd St. 64111
Youll, Donald V., 6700 Troost 64131
Youmans, Ronald A., 415 E. 63rd St. 64110
Young, James E., 716 Medical Plaza 64111

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* Doctor of Osteopathy.

Young, Jesse W., 1401 Southwest Blvd., Kansas City, Kan. 66103
Youngblood, James P., 4620 Nichols Parkway 64112
Zacharias, David L., St. Joseph Hosp., Linwood Blvd. at Prospect 64128
Zahony, Ivan, Suite 350, 2929 Baltimore Ave. 64108
Zahorsky, Carroll L., 230 Penn Park Medical Center 64108
Zellermayer, Jacob, 5801 Lockton La., Shawnee Mission, Kan. 66205
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Zwerenz, Bruno H., 600 E. 22nd 64108

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Ferguson, Lewis H., Jr., 315 Sweetbriar Dr., Alexandria. La. 71301
Ferguson, Ralph L., P.O. Box B, 64801
Ferguson, Robert M., 2015 Jackson 64801
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Hallaba, M. A. S., 25th & Jackson 64801
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Hurst, Wilfred W., Medical Arts Bldg. 64801
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Isbell, Charles H., Carthage 64836
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McPike, Lloyd H., 2401 Jackson 64801
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Martin, Clarence A., 2815 Wisconsin 64801
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Papp, Sandor D., Medical Arts Bldg. 64801
Patterson, Donald R., 2509 Jackson 64803
Patterson, Grover S., 510 S. Main, Carthage 64836
Pence, F. Wendell, 612 S. Main, Carthage 64836
Poor, Carl W., Rt. 1, Box 302, Neosho 64850
Post, Winfred L., 2630 E. 15th, Joplin 64801
Powell, Robert G., 2329 Jackson 64803
Pryor, Ira J., 2604 Picher 64801
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Scorse. Sidney W., 619 W. 2nd 64801
Shanahan, Mary P., P.O. Box 2125 64801
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Carron, Joseph F., Arnold 63010
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Boydston, W. Wayne, Odessa 64076
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Huber, K. Herbert, 501 Atlanta Ave., Pensacola, Fla. 32507
Kelling, Jordan, Waverly 64096
Koppenbrink, Walter E., Jr., 1712 Main, Higginsville 64037
LaHue, William C., 402 N. 15th, Lexington 64067
McFadden, Gene A., Waverly 64096
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Vajaranant, Manit, Medical Clinic, Lexington 64067
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Buben, Robert W., 2910 St. Mary's Ave.
Burns, Francis R., Tower Plaza, Clinic Rd.
Burton, Dale F., P.O. Box 311
Clisham, John F., B & L Bldg.
Comer, J. Russell, 23 Pauline Dr.
Fischer, Thomas J., 2910 St. Mary's
Foreman, Phillip B., Box 311
Greene, Harry L., 109 B Virginia
Hall, Stanley G., 9 Fair Oaks
Hamlin, Wyeth, Box 311
Hinds, R. David, 3 Paulina Dr.
Jayanandaiah, H. P., 4022 Edgewood
Kruse, Carl R., 706 S. Dickerson, Palmyra 63461
Lanning, Robert J., 115 N. 5th St.
Latimer, Walter N. A., 115 N. 5th
Lichty, Charles A., Shelbina 63468
Lucke, Eugene M., 4000 McMasters Ave.
Mann, James K., 4074 Hillside Dr.
Murphy, Bernard L., 2000 Crescent Dr.
Plowman, Edward M., B & L Bldg.
Rapp, Earl L., Box 311
Roller, Merrill J., 2910 St. Mary's
Steele, James C., Jr., Box 311
Swidnicki, Leonid, 15 Fairway
Walterscheid, John H., 1209 Broadway
Well, Julius W., Palmyra 63461

MERCER COUNTY
(Grand River Medical Society)

MID-MISSOURI COUNTY MEDICAL SOCIETY

(Phelps-Crawford-Dent-Pulaski-Maries-Laclede Counties)

Andreassen, Dimil F., Rolla 65401
Bass, Billy J., Salem 65560
Baumann, Albert R., Steelville 65565
Bealer, Louis A., Lebanon 65536
Butts, James D., Rolla 65401
Carnell, B. M., Camdenton 65020
Carrington, Howard W., Lebanon 65536
Cortez, Willie S., Lebanon 65536
Drake, Avery A., Rolla 65401
Draper, Bernard, 700 W. 11th, Rolla 65401
Elders, Frank A., Jr., Cuba 65453
Feind, Earl E., Rolla 65401
Froelich, R. W., Lebanon 65536
Garrison, T. W., Camdenton 65020
Hammler, Christiana V., St. James 65559
Hart, Martin M., Salem 65560

° Doctor of Osteopathy.

Heilbrunn, Ilse, 1203 B Forum Dr., Rolla 65401
Hite, Dennis E., Lebanon 65536
Holley, Donald B., Camdenton 65020
Miller, Clyde S., Waynesville 65583
Mitchell, Roy E., Salem 65560
Myers, James M., Rolla 65401
Pendell, Paul W., 215 W. Highway 72, Rolla 65401
Riffel, Gordon W., Bourbon 65441
Russell, Barbara E., Rolla 65401
Smith, Ted P., S&S Acres, Rt. 2, Rolla 65401
Stricker, Emil A., St. James 65559
Theobald, Sterling, Box 368, Camdenton 65020
White, Eugene F., 700 W. 11th, Rolla 65401
Young, Robert B., Rolla 65401

MILLER COUNTY MEDICAL SOCIETY

Buehler, Carl T., Jr., Eldon 65026
Shelton, Edward O., Eldon 65026

MINERAL AREA COUNTY MEDICAL SOCIETY

(St. Francois-Iron-Madison-Washington-Reynolds-Bollinger Counties)

Appleberry, Charles H., Rivermines 63668
Arat, Metin, Farmington 63640
Burcham, Tom R., Jr., Farmington 63640
Cancelada, Juan, Farmington 63640
Carleton, Charles E., Jr., Farmington 63640
Chastain, Charles W., Farmington 63640
Crouch, F. Richard, Farmington 63640
Datta, N. K., Bonne Terre 63628
Dennis, W. Paul, Flat River 63601
Dent, George W., Jr., 301 W. Liberty, Farmington 63640
Dettmer, Robert F., Ironton 63650
Dierker, H. D., 301 W. Liberty, Farmington 63640
Farmer, Norma D., Farmington 63640
Ford, William, Farmington 63640
Grossman, Marvin, Fredericktown 63645
Hardy, Stanton L., Desloge 63601
Harland, Robert E., 7811 Eads, LaJolla, Calif. 92037
Hoctor, Emmett F., Farmington 63640
Huckstep, Robert A., Farmington 63640
Hunt, John W., Jr., Farmington 63640
Karraker, Alvan G., Medical Arts Clinic, Farmington 63640
Mardini, Edward E., Bonne Terre 63628
Menne, Marvin C., Ironton 63650
Mullen, Jack, Bonne Terre 63628
Newcomb, Arthur D., 115 S. Wood Ave., Fredericktown 63645
Oliver, George A., Farmington 63640
Osborn, Retus W., III, VA Hosp., Chillicothe, Ohio 45601
Pichardo, Javier A., Farmington 63640
Slaughter, Shelby C., Fredericktown 63645
Supattanasiri, Gritte, 128 W. Russell, Ironton 63650
Taylor, Van W., Bonne Terre 63628
Turner, Kirby L., Potosi 63664
Watkins, George L., Jr., Farmington 63640

MISSISSIPPI COUNTY

(SEMO County Medical Society)

MONITEAU COUNTY MEDICAL SOCIETY

(California 65018)

Fulks, Richard B., California
Gallagher, Lionel M., California
Latham, Kenyon S., California

MONROE COUNTY

(Chariton-Macon-Monroe-Randolph County Medical Society)

MONTGOMERY COUNTY MEDICAL SOCIETY

Andersen, Elmer J. T., Montgomery City 63361
Byland, Samuel J., Wellsville 63384
Helm, James O., New Florence 63363

MORGAN COUNTY MEDICAL SOCIETY

(Versailles 65084)

Gunn, Jack, Versailles
Hall, C. Robert, Versailles
Kauffman, Ruth, Versailles
Lyle, Robert R., Versailles
Washburn, J. Loren, Versailles

NEW MADRID COUNTY

(SEMO County Medical Society)

NEWTON COUNTY

(Ozarks Medical Society)

NORTH CENTRAL COUNTIES MEDICAL SOCIETY

(Adair-Schuyler-Knox-Sullivan-Putnam Counties)

(Kirksville 63501)

English, Milton T., Jr., Kirksville
Freeman, Spencer L., Kirksville
Grim, Edward M., 807 Stadium Rd., Columbia 65201
Hilton, Paul E., Kirksville
Isom, Waldo B., Knox City 63446
Stickler, Ralph O., 711 E. Illinois, Kirksville
Tarvydas, Francis, Edina 63537

NORTHWEST MISSOURI MEDICAL SOCIETY

(Nodaway-Holt-Atchison-Gentry-Worth Counties)

Bare, Edward F., Tarkio 64491
Bauman, Henry C., Maryville 64468
Byland, Benjamin F., Maryville 64468
Carlin, Albert L., Stanberry 64489
Carpenter, Wallace, Rock Port 64482
Dunshee, Robert E., Maryville 64468
Humphrey, James, Mound City 64470
Imes, Elvin D., Maryville 64468
Jackson, William R., Maryville 64468
Matteson, Frank B., Grant City 64456
Morgan, Troy O., Jr., Albany 64402
Niedermeyer, Edward L., Tarkio 64491
Wanamaker, John M., Rock Port 64482
Wempe, G. Raymond, Maryville 64468

OREGON COUNTY

(South Central Counties Medical Society)

OSAGE COUNTY

(Unorganized)

OZARK COUNTY

(South Central Counties Medical Society)

OZARKS MEDICAL SOCIETY

(Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald Counties)

Anderson, Paul B., Neosho 64850
Apostol, Andres G., 801 Lincoln St., Monett 65708
Betz, Richard T., Neosho 64850
Betz, Robert F., Neosho 64850
Blankenship, George W., Neosho 64850
Bowman, Melvin C., Neosho 64850
Brasher, Charles A., Mt. Vernon 65712
Brown, Frederick B., Aurora 65605
Brown, Robert M., 1804 Cedar Crest, Manhattan Kan. 66502
Capetti, Alex P., Crane 65633
Carter, James R., Neosho 64850
Christianson, Charles S., Mt. Vernon 65712
Coffman, Esther E. L., P.O. Box 591, Lakeworth, Fla. 33460
Crain, James W., Branson 65616
Cruz, Sergio G., Jr., 801 Lincoln, Monett 65708
Dabbs, Wilbur D., Neosho 64850
Donley, Robert R., Monett 65708
Edwards, Francis L., RR2, Box 164, Lamoni, Ia. 50140
Esparrago, Francisco R., Jr., Monett 65708
Galinsky, Leon, 128 Ritter, Republic 65738
Gardner, Joseph W., 8 Walnut Lane, Kimberling City 65686
Gillispie, Roy, Branson 65616
Glass, William J., Jr., Monett 65708
Glover, Kenneth, Mt. Vernon 65712
Graves, Arthur J., Mt. Vernon 65712
Hamilton, William P., Aurora 65605
Hellweg, Charles E., Mt. Vernon 65712
Huntington, Ione, Mt. Vernon 65712
Kelsey, Kenneth L., Aurora 65605
Kenney, Roy E., Neosho 64850
Kerr, Frank T., Monett 65708
Lentz, Harold C., Neosho 64850
Magness, William C., Branson 65616
Mars, Hartley F., Forsyth 65653
Merideth, Mary Jane, Cassville 65625
Meyers, Rosellen C., Cedar Vale Regional Hospital, P.O. Box 398, Cedar Vale, Kan. 67204
Moore, Allen H., Jr., Branson 65616
Morrison, T. A., Aurora 65605
Olive, George C., Neosho 64850
Parkison, Donald E., Seligman 65745
Petit, Carlos A., Aurora Community Hospital, Aurora 65605
Roper, Stanley D., Ozark 65721
Saxena, Narendra, Mt. Vernon 65712
Schultz, Loraine E., TTUSM, Box 4569, Lubbock, Tex. 79409
Shumate, L. St. Clair, Reeds Spring 65737
Spears, Charles A., 1153 W. Hwy. 76, Branson 65616
Taylor, Leo T., Neosho 64850
Wommack, Fred L., Crane 65633

PEMISCOT COUNTY MEDICAL SOCIETY

Aquino, Philip J., Caruthersville 63830
Bernard, J. W., Caruthersville 63830
Cain, Charles F., Caruthersville 63830
Cook, Oliver W., Caruthersville 63830
Duckworth, Gordon Lee, Jr., Hayti 63851
Grable, James, Portageville 63873
Gubin, Alan S., Caruthersville 63830
McCoy, Warren R., Caruthersville 63830
McKaskle, Clarence W., Caruthersville 63830
Painter, Andrew E., Portageville 63873
Painter, Lattie B., Jr., Portageville 63873
Shirey, Arnold G., Hayti 63851

PERRY-STE. GENEVIEVE COUNTIES MEDICAL SOCIETY

Carron, Oscar A., Perryville 63775
Craig, Ronald D., Perry Plaza Medical Center, Perryville 63775
DeGenova, Gerard H., Ste. Genevieve 63670
Eugenio, Romeo R., Perry Plaza Medical Center, Perryville 63775
Fairchild, James F., Perryville 63775
Feltz, Lawrence W., Perryville 63775
Fischer, Theodore, Altenburg 63732
Key, Martin L., Center Dr. & Hospital La., Ste. Genevieve 63670
Lanning, Richard C., Ste. Genevieve 63670
Lutkewitte, Joseph F., Ste. Genevieve 63670
McDermott, Alfred E., Perryville 63775
Pontillas, Job B., Perryville 63775
Utterman, William F., 614 S. Main, Perryville 63775

PETTIS COUNTY MEDICAL SOCIETY

(Sedalia 65301)

Block, J. E., Rt. 2, Box 53B
Boger, James W., 500 W. 16th St.
Braverman, Elliot M., 1501 S. Grand Ave.
Brazos, John C., Smithton 65350
Campbell, Albert J., Jr., 625 E. 13th
Cole, William R., Rt. #1, Smithton 65350
Daum, Harold F., Bothwell Memorial Hosp.
Edmonds, Robert W., 1718 S. Ingram
Edwards, David R., 700 S. Limit
Eldenburg, Donald, 700 S. Limit
Erickson, H. John, 1501 S. Grand
Fisher, Stanley D., 500 W. 16th
Glass, Robert L., 811 Hulen Dr., Columbia 65201
Hopkins, Thomas J., 700 S. Limit
Hopkins, T. Spencer, 1718 S. Ingram
Lamy, John E., 400½ Dal-Whi-Mo
Lowe, Alvin L., 621 W. 16th St.
Maddox, Albert R., 116 W. Main
Owens, John H., Bothwell Memorial Hosp.
Proctor, Donald C., 700 S. Limit
Roberts, Paul A., Sweet Springs 65351
Stauffacher, C. Gordon, 700 S. Limit
Stewart, Robert H., Bothwell Memorial Hosp.
Stockwood, Robert C., 1718 S. Ingram
Van Dyke, Elmer H., 1718 S. Ingram
Walter, Archie L., 500 W. 16th St.
Worley, Charles A., Sweet Springs 65351

PHELPS COUNTY

(Mid-Missouri County Medical Society)

PIKE COUNTY MEDICAL SOCIETY

Christensen, Roger F., 120 N. "A" St., Louisiana 63353
Jackson, Edward K., Clarksville 63336
Lewellen, Charles H., Louisiana 63353
Martin, W. Joe, Louisiana 63353
Middleton, John W., Louisiana 63353
Miles, Glenn E., Louisiana 63353
Nickels, Mathew L., 420 Forest Hills Dr., Louisiana 63353
Stuerman, Lawrence G., 211 S. 3rd., Louisiana 63353
Wilcoxen, William B., Bowling Green 63334

PLATTE COUNTY MEDICAL SOCIETY

Allen, S. Lloyd, 3809 N.W. 62 Terr., Kansas City 64151
Kimball, Ireland W., 5621 Valley Rd., Kansas City 64151
Riordan, Robert H., 11500 Ambassador Dr., Kansas City 64153
Thurman, Hill C., Parkville 64152
Vescovo, Paul C., 4106 Vivion Rd., Kansas City 64119
Wolfram, Philip H., Platte City 64079

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*Doctor of Osteopathy.

POLK COUNTY
(Dallas-Hickory-Polk-Dade County Medical Society)

PULASKI COUNTY
(Mid-Missouri County Medical Society)

PUTNAM COUNTY
(North Central Counties Medical Society)

RALLS COUNTY
(Marion-Ralls-Shelby County Medical Society)

RANDOLPH COUNTY
(Chariton-Macon-Monroe-Randolph County Medical Society)

RAY COUNTY
(Lafayette-Ray County Medical Society)

REYNOLDS COUNTY
(Mineral Area County Medical Society)

RIPLEY COUNTY
(Butler-Wayne-Ripley County Medical Society)

ST. CHARLES-LINCOLN COUNTY MEDICAL SOCIETY
(St. Charles 63301)

Baird, Keim L., 2850 W. Clay St.
Bautista, Rogelio L., 601 S. Brentwood, St. Louis 63105
Cabrera, Tomas V., 525 Couch, St. Louis 63122
Canty, Eugene J., 114 N. Main
Carpenter, James L., 2 Westhury Square
Clever, Henry W., Jr., 1301 Boonslick Rd.
Commerford, John F., 1301 Boonslick Rd.
Connelly, Michael W., 805 Paddock Dr., Florissant 63033
Creech, Joseph C., Troy 63379
Crider, Russell J., 222 S. 2nd St.
Curry, Michael J., 2850 W. Clay
Damron, Edward O., Elsberry 63343
Del Pizzo, Ferdinand, Jr., 1301 Boonslick Rd.
Duling, Gerald J., 2850 W. Clay St.
Dumonceaux, Leonard J., #2 Westhury Square
DuMontier, R. J., O'Fallon 63366
Duncan, David, 2850 W. Clay
Felder, James P., 515 Jefferson
Fleming, Robert J., 12C Clay
Goldkamp, John D., 2850 W. Clay St.
Gore, Glenn L., 2414 W. Clay St.
Hammes, Roman E., 2850 W. Clay St.
Hetlage, Louis P., Troy 63379
Kamada, Tsutomu, 115 W. Pitman, O'Fallon 63366
Keefe, David M., 2850 W. Clay
Keller, Rohert, 704 W. Pearce Blvd., Wentzville 63385
Kister, George E., 302 S. 2nd St.
Lincoln, James, Highway 47 E., Troy 63379
Linsenmeyer, Charles M., 117 First Capitol Dr.
McQueen, Samuel, 11636 Administration Dr., St. Louis 63141
Miller, Richard B., 2850 W. Clay
Muenster, Vincent P., 2850 W. Clay St.
Muhm, Harvard Yale, 1301 Boonslick
Nenbeiser, Ben L., 2nd & Clay Sts.
Ohando, Francisco J., Troy 63379
Ordoukhanian, Tatool, 1301 Boonslick
Perna, Vincent P., 11636 Administration Dr., Creve Coeur 63141
Poggemeier, William H., Jr., 304 S. 2nd St.
Reisa, Ronald C., 2850 W. Clay
Rice, Ronald B., 1301 Boonslick
Roach, Edward A., 2850 W. Clay St.
Roter, Alexander M., #2 Westhury Dr.
Rother, Paul H., 1301 Boonslick Rd.
Roxas, Generoso P., #2 Westhury
Schneider, Thomas A., 2850 W. Clay St.
Schuetz, Alfred, 904 Indian Hills
Smoller, Martin B., 2850 W. Clay St.
Soucy, John C., 2850 W. Clay
Tassi, Albert A., 6 Westminster Ct.
Thiele, O. K., #2 Westhury
Towers, Orville W., 1301 Boonslick Rd.
Vafi, Houshang, #2 Westbury
Vart, Gary R., 515 Jefferson
Westerfeld, Roy A., 1301 Boonslick Rd.
Wipfler, Earl J., Jr., 405 Duckett
Yaeger, Gerald A., 2444 W. Clay St.

ST. CLAIR COUNTY
(West Central Missouri Medical Society)

ST. FRANCOIS COUNTY
(Mineral Area County Medical Society)

STE. GENEVIEVE COUNTY
(Perry-Ste. Genevieve Counties Medical Society)

ST. LOUIS MEDICAL SOCIETY
(St. Louis)

Ahel, Charles C., 4511 Forest Park Blvd. 63108
Ahel, Oliver, 111, 4511 Forest Park Blvd. 63108
Ahelardo, Miguel L., 5400 Arsenal 63139
Abell, Walter E., 2253 S. 39th St. 63110
Ahinoja, Conrado B., 4909 Lindenwood 63109
Abrams, Morris, 4919 Forest Park Blvd. 63108
Abramson, Charles L., 141 N. Meramec 63105
Acker, Harry L., 150 N. Meramec 63105
Ackerman, Lauren V., 600 S. Kingshighway 63110
Adler, Benard C., 4511 Forest Park Blvd. 63108
Agasino, Armela R., 2244 Union Rd. 63125
Agasino, Guadencio L., Box 306, Arnold 63010
Agress, Harry, 8631 Delmar 63124
Aguinaldo, Jaime A., 5535 Delmar 63112
Ahadi, Abd Ul Ahad, 13029 Amhois Dr. 63141
Ahern, Archihald M., 3915 Watson Rd. 63109
Ahlering, George H., 950 Francis Pl. 63105
Ahmad, Bashir, 7933 Elton 63123
Aitken, Louis F., 4989 Barnes Hosp. Plaza 63110
Aker, Umit, 4550 Scott 63110
Akyol, Salim, #4 Highfield Lane 63131
Alegre, Jorge M., 5535 Delmar 63112
Aleksander, Bernardo, 1420 Grattan 63104
Alexander, France, 18 S. Kingshighway 63108
Alexander, Frazier D., 4969 Enright Ave., 63108
Allen, Henry C., Clayton Medical Bldg., 63105
Allen, Hollis N., 2821 N. Ballas Rd. 63131
Allen, Melvin A., 3555 Sunset Office Dr. 63127
Allen, Willard M., University of Maryland, Baltimore, Md. 21201
Allen, William E., Jr., 720 N. Sarah 63108
Almiron, Osias A., 6150 Oakland Ave. 63139
Alonso, Jose Mario V., Jr., 10110 Hilltop Dr. 63128
Alonso, William A., 4989 Barnes Hosp. 63110
Alonso-Yague, P., 330 Northland Medical Bldg. 63136
Altheide, J. Paul, 4605 Lindell 63108
Alvarez, Luis L., 1606 Grattan 63104
Alvis, Bennett Y., 211 N. Meramec 63105
Alvis, Edmund B., 211 N. Meramec 63105
Amado-Ledo, David E., 300 S. Grand Ave. 63103
Amin, Navinkumar, 607 N. Grand Blvd. 63103
Amjad, Mohammed T., 1211 Blairshire Dr. Manchester 63011
Anderson, Charles B., 14 Frederick 63122
Anderson, John M., 1420 Gratton 63104
Angelillo, John C., 4 Waterways Ct., Florissant 63033
Anglo, Luis B., 3912 Ritz Center 63125
Ansari, Ansar H., 6150 Oakland 63139
Anstey, George, 10449 St. Charles Rock Rd., St. Ann 63074
Anthony, Elwyn J., 369 N. Taylor Ave. 63108
Arenherg, Irving K., 517 S. Euclid 63110
Arneson, Axel N., 4511 Forest Park 63108
Arney, William G., 16 Hampton Village Plaza 63109
Arnold, Kenneth J., 4989 Barnes Hospital Plaza 63110
Arnot, John P., 35 N. Central Ave. 63105
Auer, Arthur I., 667 Langton 63105
Auer, Edward T., #9 Clayton Terr. 63131
Aufderheide, G. R., 2326 Noll Dr. 63136
Auguste, Jean Meledain, 3530 Laclede 63103
Augustin, Cesar, 17 Friese Dr. 63132
Aulenhacher, Carl E., 1509 E. 3rd Parkway, Washington 63090
Avila, Estrella Z., 936 Brookvale Terr., Manchester 63011
Avila, Patricio C., 936 Brookvale Ter., Manchester 63011
Avioli, Louis V., P.O. Box 14109 63178
Aykent, Yavuz, 911 S. Brentwood Blvd. 63105
Aylward, Howard J., 6651 Chippewa 63109
Azuma, Nohutaka, 3901 Tholozan 63116
Azzouni, Joseph N., 542 Gravois Rd., Fenton 63026
Bahka, Joseph J., 3845 Federer Pl. 63116
Backer, Matthias H., Jr., 10345 Watson Rd. 63127
Badger, Virginia M., 113 Stoneyside Lane 63132
Bailey, Drennan, 6356 Clayton Rd. 63117
Ballinger, Walter F., II, 4960 Auduhon Ave. 63110
Bandle, Donald F., 3801 January 63139
Banet, Samuel R., 83 Pehblebrook Lane 63141
Bannon, Anne E., 1515 Lafayette 63104
Banton, M. Roman, 13634 Peacock Farm Rd. 63131
Banton, Thomas J., 114 Northland Medical Bldg. 63136
Banton, William C., 601 S. Brentwood 63105
Bardsley, John L., 615 S. New Ballas Rd. 63141
Barner, Hendrick, 1325 S. Grand Blvd. 63104
Barrett, Scott R., 5505 Delmar 63112
Barrios, Francisco, 5641 Potomac 63139
Bartlett, Robert W., 100 N. Euclid 63108
Bartlett, Willard, Jr., 6345 Ellenwood Ave. 63105
Bartnick, Mitchel L., RR #2, Box 38, De Soto 63020
Baue, Arthur E., P.O. Box 14109 63178
Bauer, John D., Northland Medical Bldg. 63136
Bauer, Maria, 1935 Edison, Granite City, Ill. 62040
Bauer, Otto, 1935 Edison, Granite City, Ill. 62040
Baula, Armindo G., 609 Jeffersonian Dr. 63125
Baumgarten, Walter, Jr., 5505 Delmar 63112
Beare, J. Byron, 777 S. New Ballas Rd. 63141
Beato, David L., 6305 Devonshire 63109
Beaty, William R., 35 Muirfield La., 63141
Becker, Bernard, 640 S. Kingshighway 63110
Becker, Edward J., 906 Olive 63101
Becker, George H., 6744 Clayton Rd. 63117
Becker, Stanley C., 16 Hampton Village Plaza 63109
Beckette, Edmund S., 950 Francis Pl. 63105
Beckman, Donald E., 4205 Virginia Ave. 63111
Behrens, Donald T., 3654 S. Grand Blvd. 63118
Behrens, Gerald L., 11271 Hermitage Hill Rd. 63131
Beidle, Raymond J., 500 Northwest Plaza, St. Ann 63074
Belancourt, Dunet F., P. O. Box 4767 63108
Belew, Joe E., 5505 Delmar 63112
Bell, Rohert M., 100 North Euclid 63108
Bennett, Kenneth J., 4919 Forest Park 63108
Benson, John F., 3737 N. Kingshighway 63115
Berard, Louis N., 812 Olive 63101
Berg, Edward F., 5 Cedarcrest, Ladue 63132
Berg, Leonard, 4989 Barnes Hospital Plaza 63110
Berg, Ralph, 3203 S. Grand 63118
Bergman, Hugo F., 3720 Washington 63108
Bergmann, Dwayne, 6500 Chippewa 63109
Bergner, Grace E., 114 N. Taylor 63108
Berland, Harry I., 812 Olive 63101
Berman, William, 4910 Forest Park Blvd. 63108
Berni, Anthony A., 777 S. New Ballas Rd. 63141
Berry, John W., 9845 Northhridge 63124
Bersche, Bertram L., 23 Beaver Dr. 63141
Bettonville, Paul J., Jr., 6331 Pershing 63130
Biddy, Ralph L., 915 N. Grand Blvd. 63103
Bigger, John F., Jr., 660 S. Euclid 63110
Bilsky, Nathan, 4511 Forest Park Blvd. 63108
Bindheutel, Donald A., 25 Willow Oak Lane 63122
Binder, Morton A., 4652 Maryland 63108
Bircher, John L., 3932 Federer Pl. 63116
Bird, H. Waldo, 4511 Forest Park Blvd. 63108
Birge, Clifford A., 12 Ridgetop 63117
Bishop, Mary M., 4524 Forest Park Ave. 63108
Bisno, Daniel, 8000 Bonhomme Rd. 63105
Blackwell, Charles R., 8236 Tulane Ave. 63132
Blair, Vilray P., Jr., #9 Stoney Brooks La. 63124
Bleisch, Virgil R., 524 Midvale 63103
Block, Arnold S., 4511 Forest Park Blvd. 63108

° Doctor of Osteopathy.

Blount, Lee, Jr., 3737 N. Kingshighway 63115
Bockelman, Clifford H., 2615 Brentwood Blvd. 63117
Boedeker, Roy V., 1035 Bellevue 63117
Boemer, Lilborn C., 49 Clermont Lane 63124
Bohigian, George, 211 N. Meramec 63105
Bolch, Oscar H., Jr., 4911 Barnes Hospital Plaza 63110
Boldizar, Albert G., 2821 N. Ballas Rd. 63131
Boldt, Thomas H., Northland Medical Bldg. 63136
Bollozos, George D., 5091 Clayridge Dr. 63129
Bondurant, Bryce H., 134 Frontenac Forest 63131
Bonfanti, Albert L., P.O. Box 4148, Jennings Station 63136
Boniuk, Isaac, 4989 Barnes Hospital Plaza 63110
Borowsky, Benjamin A., 4910 Forest Park 63108
Boswell, John R., 12918 Topping Estates North Dr. 63131
Bourke, Thomas E., 206 Northland Medical Building 63136
Boveri, Joseph C., 1862 Point Oak Dr. 63131
Bowdern, Edward H., #2 Berkshire La. 63117
Bowen, Stephen F., Jr., 16 Hampton Village Plaza 63109
Bowerman, Harold H., 607 N. Grand 63103
Bowers, James E., 12166 Big Bend Blvd., Kirkwood 63122
Bowersox, Warren A., 319 N. First St., Pacific 63069
Bowles, William T., 4960 Audubon 63110
Boyarsky, Saul, 4960 Audubon Ave. 63110
Boyd, Arthur M., 1615 S. Grand Ave., 63104
Bradley, Frank R., 7404 Oxford Dr. 63105
Bradley, Richard V., 35 N. Central 63105
Brady, Harry R., 1609 Dumorr Dr. 63131
Brangle, Robert W., 765 High Hampton Rd. 63124
Bremer, Rita, 2601 Whittier 63113
Bremser, Harry L., 6742 Plainview 63109
Brennan, George A., 3654 S. Grand 63118
Brennan, Robert A., 3654 S. Grand 63118
Brennan, Robert V., 111 N. Taylor 63122
Brereton, Robert L., 206 N. Clay Ave., 63122
Bricker, Eugene M., 4989 Barnes Hospital Plaza 63110
Brisco, C. William, 4940 Audubon 63110
Brodeur, Armand E., 400 Bambury Way 63131
Bronson, Shael S., 777 S. New Ballas Rd. 63141
Brookes, Robert D., 5505 Delmar 63112
Brooks, John E., Barnes Hospital Plaza 63110
Broun, Goronwy O., 1325 S. Grand 63104
Broun, Goronwy O., Jr., 6359 Waterman 63105
Brown, E. Eugene, 7508 Cromwell Dr. 63105
Brown, James Lowry, 915 N. Grand 63106
Brown, James M., 11936 Beth Dr. 63126
Brown, Seymour, #2 Ricardo La. 63124
Bruce, Helen L., 3263 Hawthorne Blvd. 63104
Brugger, Thomas, 369 N. Taylor Ave. 63108
Bruns, Kenneth, #1 Salem Estates 63124
Bryan, James H., 950 Francis Pl. 63105
Bryan, William T. K., 950 Francis Pl. 63105
Bucy, James G., 4960 Audubon 63110
Budd, John J., Jr., 9012 Manchester 63144
Burde, Ronald M., 517 S. Euclid 63110
Burdge, Robert E., 1301 S. Grand 63104
Burford, Thomas H., Barnes Hospital Plaza 63110
Burke, Robert J., 6379 Devonshire 63109
Burkhart, Charles A., Box 396, 63166
Burkhart, Edward F., Mercy Doctor's Building, 621 S. New Ballas Rd. 63141
Burmeister, R. William, 10834 Forest Circle Dr. 63128
Burns, Francis J., 1035 Bellevue Ave. 63117
Burr, Donald C., 141 N. Meramic 63105
Burst, Donald O., 6500 Chippewa 63109
Busch, Anthony K., 2101 Sidney St. 63104
Bussmann, Donald W., 4 Wood Acre Rd. 63124
Butcher, Harvey R., Jr., 4960 Audubon 63110
Byrne, John E., 3720 Hampton Ave. 63109
Byrne, Paul A., 4211 Bayless Ave. 63123
Byrum, Fritz A., 650 Manchester Rd., Ballwin 63011

Cabal, Edito C., St. Louis VA Hosp. 63125
Cabonce, August L., 751 St. Francois, Florissant 63031
Caciolo, Carlo, 3654 S. Grand Blvd. 63118
Cadice, John B., Northland Medical Bldg. 63136
Calderon, Marcos, 911 S. Brentwood 63105
Callahan, Joseph D., 22 Brentmoor Park 63105
Calodney, Martin M., 7247 Delmar 63105
Camel, H. Marvin, 310 Tanglewood Dr. 63124
Campbell, Cecil S., 812 Olive 63101
Campos, Francisco J., 11636 Administration Dr. 63141
Canaan, Samuel A., Jr., 607 N. Grand 63103
Cannon, Edward M., #20 Briarcliff 63124
Cantor, Harvey E., 1465 S. Grand 63104
Cappel, Powel B., 27 Old Westbury 63119
Carlin, M. Richard, 100 N. Euclid 63108
Carlson, Gabrielle A., 7900 Natural Bridge 63121
Carr, Archie D., 59 Fair Oaks 63124
Carranza, Mauro J., Medical Arts Bldg., Hillsboro 63050
Carroll, George A., 3720 Washington 63108
Carroll, Grayson, 1035 Bellevue 63117
Carson, Richard A., 4930 Sunstone Dr., Ballwin 63011
Carter, John F., 29 Berkshire 63117
Cary, John M., 2821 N. Ballas Rd. 63131
Case, Mary E. S., 1302 S. Grand 63104
Casey, Edwin J., 4424 Hampton 63109
Casey, Eliot, 3220 Parker Rd., Florissant 63033
Cason, Elbert H., 1704 S. Broadway 63104
Caspari, Richard B., 135 W. Adams 63122
Cassel, Melvin A., 1040 N. Mason Rd. 63141
Castasus, Manuel, 600 N. Union 63108
Catanzaro, Anthony F., 2705 Clifton 63139
Catanzaro, Francis J., 1235 N. Hanley Rd. 63130
Cavanagh, Denis, 1402 S. Grand Blvd. 63104
Cayabyab, Pedro C., 10040 Sakura Dr. 63128
Chadaratana, Phadung, 2601 Whittier 63113
Chamness, James T., #1 St. Andrews Dr. 63124
Chand, Suresh, 1420 Grattan 64104
Chaplin, Hugh, Jr., 509 S. Euclid 63108
Charles, Benjamin H., 5505 Delmar 63112
Charles, Francois R., 506 White Rose La. 63132
Charnas, Raymond M., 1040 Mason Rd., North 63141
Cherre, Anthony J., 6744 Clayton Rd. 63117
Cherre, Charles J., 4511 Forest Park Blvd. 63108
Chesanow, Robert L., 1515 Lafayette Ave. 63104
Cheuk, Shu-sum, 5535 Delmar Blvd. 63112
Chieffi, Margaret, 6744 Clayton Rd. 63117
Chipongian, Raul A., 4569 Whisper Lake Dr., Florissant 63033
Chishti, M. Ishaq, 1035 Bellevue 63117
Cho, Kyu S., 4919 Forest Park 63108
Chou, Yen Ping, Robert Koch Hospital, Koch 63054
Chung, Tzi-Chorng, 4801 Linwood Blvd. 63113
Ciapciak, Stanley J., 1502 St. Louis 63106
Clark, Richard E., 4960 Audubon 63110
Claseman, Wilma W., 6154 Westminster Pl. 63112
Cleary, Frank, 4030 Chouteau 63110
Clendenin, Wm. W., 950 Francis Pl. 63105
Coben, Lawrence A., 640 S. Kingshighway 63110
Cohen, Benjamin H., 138 N. Meramec 63105
Cohen, Hillard K., 500 Northwest Plaza, St. Ann 63074
Cole, Robert R., 11636 Administration Dr. 63141
Collins, John A., 4960 Audubon Ave. 63110
Collodi, George A., 3555 Longfellow Pl. 63104
Colosi, Nicholas J., 1325 S. Grand 63104
Comas, Manuel R., 514 Tenby Terr., Manchester 63011
Comens, Phillip, 6651 Chippewa 63109
Comens, Ruth C., 8826 Woodfox Dr. 63127
Conrad, Adolph H., Jr., 911 S. Brentwood Blvd. 63105
Conrad, Marshall B., 4960 Audubon 63110
Cook, Marvin A., 3220 Parker, Florissant 63033
Cooper, Henry T., 4401 Hampton Ave. 63109
Cooper, James F., 11115 New Halls Ferry Rd., Florissant 63033
Cooper, Theodore, 5204 W. Cedar Lane, Bethesda, Md. 21104
Cooper, Thomas J., P.O. Box 11653, Clayton Branch 63105
Cooper, Thomas P., 3809 Union Blvd. 63115
Copp, Ralph, 4989 Barnes Hosp. Plaza 63110
Corday, Robert J., 1465 S. Grand 63104
Cordonnier, Justin, 4960 Audubon 63110
Coronado, Mario A., 12660 Lamplighter Sq. 63128
Corvalan, Juan C., 4989 Barnes Hospital Plaza 63110
Costa, Dominic V., 1212 S. Grand 63104
Costello, Cyril J., 621 S. New Ballas Rd. 63141
Costello, Joseph P., Jr., 57 Berkshire 63117
Costen, William S., 5505 Delmar 63112
Cox, Mary E., 4524 Forest Park Blvd., 63108
Coxe, William S., 600 S. Kingshighway 63110
Craig, Alan G., 1035 Bellevue 63117
Crespin, Stephen R., 777 S. New Ballas Rd. 63141
Criscione, James R., 4273 Flora Pl. 63110
Criscione, James S., 652 Bambury Way 63122
Crossman, Robert W., 1509 Holly Dr. 63119
Crowell, Hugh C., 9764 Tesson Ferry Rd. 63123
Cruz, Eligio C., 5505 Delmar Blvd. 63112
Cubillo, Enrique, 510 S. Kingshighway 63110
Cutler, Harold M., 150 N. Meramec 63105
Czebrinski, Edward W., 3555 Sunset Office Dr. 63127

Daake, John W., 48 Portland Pl. 63108
Dagartzikas, A. K., 12902 Tundra, Town & Country 63131
Dahm, Charles H., Jr., 1009 Julianna Dr., Ballwin 63011
Daley, Phillip G., 6651 Chippewa 63109
Dalton, Arthur R., 35 N. Central 63105
Dames, Richard J., 15 York Dr. 63117
Danforth, William H., Chancellor, Washington University 63130
Danis, Peter G., 2821 N. Ballas Rd. 63131
Danis, Richard K., 1401 S. Grand 63104
Dankner, Arnold, 1010 Collingwood Dr., 63132
Dash, Udaya N., 6500 Chippewa 63109
Davis, Gustave L., P.O. Box 14109 63178
Davis, Martin W., 911 S. Brentwood Blvd. 63105
Davis, Mary A., 1627 Renoir La. 63141
Dawley, John, 1325 S. Grand Blvd. 63104
Deakin, Rogers, 4530 W. Pine Blvd. 63108
De Jesus, Alberto, 615 S. New Ballas Rd. 63141
Del Carmen, Jaime J., 46 Worthington Dr., Maryland Heights 63043
Deleste, Carlos J., 2639 Miami 63118
Del Valle, Fernando, 150 N. Meramec 63105
Denk, Alan F., 1035 Bellevue 63117
de Ungria, Estelita M., 2601 N. Whittier 63113
de Ungria, Pablo C., Jr., 6744 Clayton Rd. 63117
de Vera, Anson E., 5085 Reynosa Dr. 63128
Devgan, Baldev K., 1325 S. Grand Blvd. 63104
Devine, John B., 85 Willmore Rd. 63109
DeVivo, Darryl C., 500 S. Kingshighway 63110
Dewald, Paul A., 4524 Forest Park Blvd. 63108
Dewein, Edward G., 8220 Delmar 63124
Dick, Earl, 121 W. Riding Dr., Cherry Hill, N. J. 08034
Diemer, Peter A., 2105 Briargate Lane 63122
DiLeo, Senatro W., 1245 Graham Rd., Florissant 63031
Dillard, Burl M., 2821 N. Ballas Rd. 63131
Dmytryk, Eugene T., 141 N. Meramec 63105
Dodge, Philip R., 500 S. Kingshighway, 63110
Doisy, Philip P., 325 N. Kirkwood Rd. 63122
Dolan, John T., Jr., 3915 Watson Rd. 63109
Donaldson, Robert C., VA Hospital 63125
Donati, Robert M., 915 N. Grand 63106
Dooley, Joseph M., Jr., 4989 Barnes Hospital Plaza 63110
Dorton, Robert K., 911 S. Brentwood Blvd. 63105
Doucette, Raymond C., 100 N. Euclid 63108
Doyle, Charles R., 1035 Bellevue 63117
Drace, Charles C., Jr., 19 E. Lockwood 63119

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[*] Doctor of Osteopathy.

Drake, William L., Jr., 6150 Oakland Ave. 63139
Drescher, Emmett B., 35 N. Central 63105
Drews, Robert C., 211 N. Meramec Ave. 63105
Drey, Norman W., 4511 Forest Park Blvd. 63108
Dreyer, Carl J., 45 Glen Rd. 63119
Dubuque, Theodore J., Jr., 1035 Bellevue 63117
Duemler, John H., 5321 Sunshine Dr. 63109
Duemler, Robert H., 12166 Big Bend Blvd., Kirkwood 63122
Duffy, Francis G., 8116 University Dr. 63105
Dunn, Robert E., 7201 Hampton 63109
Dworkin, Saul, 3177 S. Grand 63118
Dwyer, Richard M., 1350 Cordova Ave., Glendale, Calif. 91207
Dyer, Dallas J., 3915 Watson Rd. 63109
Dzundzev, Penco, 3601 S. Jefferson Ave. 63108
Eachempati, Rama G., 1515 Lafayette 63104
Eades, Dee W., 7602 S. Broadway 63111
Eades, Joseph W., 4910 Forest Park Blvd. 63108
Eagleton, Mark D., 777 S. New Ballas Rd. 63141
Earp, Ralph K., Northland Medical Bldg. 63136
Eberle, Vincent L., 141 N. Meramec 63105
Echterhoff, Harry R., 310 Honeysuckle La. 63119
Eck, Birkle, 1819 Camberly Rd. 63131
Eckert, Clarence T., 2295 Gulf of Mexico Dr., Apt. 82-South, Sarasota, Fla. 33577
Ecklund, Archibald M., 2210 Locust, San Diego, Calif. 92106
Edele, Eugene H., 4971 Chippewa 63109
Edelman, Alan H., 2821 No. Ballas Rd. 63131
Edmond, Beauvoir H., 600 N. Union 63108
Edwards, James E., 1420 Grattan 63104
Edwards, Joseph C., 4989 Barnes Hospital Plaza 63110
Efstathianos, Kimon, 4658 Britcastle Dr. 63128
Egan, Robert C., 7830 Carondelet Ave., 63105
Egan, Thomas F., 9852 Northbridge 63124
Eigel, Edwin G., 3438 S. Grand 63118
Eimer, Charles E., 3863 W. Pine 63108
Eisen, Arthur Z., Barnes Hospital Plaza 63110
Eliasson, Sven G., 660 S. Euclid 63110
Ellersieck, Dorothy M., 10437 Ewell 63137
Ellsasser, James C., 4960 Audubon Ave. 63110
Ernst, Edwin C., Jr., 3720 Washington 63108
Ernst, Richard E., 3720 Washington 63108
Ernst, Roland P., 12327 Creekhaven 63131
Esslinger, Arthur T., 2821 N. Ballas Rd. 63131
Estrada, Corazon D., 2644 Hadden 63136
Estrada, Jesus I., 2644 Hadden Dr. 63136
Etienne, Robert B., 6000 Westminster 63112
Eto, Jackson, 6651 Chippewa 63109
Evens, Ronald G., 510 S. Kingshighway 63110
Eyerman, Edward L., Jr., 1035 Bellevue 63117
Eyermann, Charles H., 4259 Flora 63110
Fabian, Leonard W., 660 S. Euclid Ave. 63110
Fallon, Richard H., 4989 Barnes Hospital Plaza 63110
Farrell, Frank W., 105 Northland Medical Bldg. 63136
Farrell, Robert J., 141 N. Meramec 63105
Feeley, Donald R., 1111 Woods Mill Rd., Ballwin 63011
Fehlman, Bernard F., Jr., 6420 Clayton Rd. 63117
Feigin, Ralph D., 500 S. Kingshighway 63110
Feinstein, Leon A., 6411 Wydown 63105
Felix, Robert H., 1402 S. Grand 63104
Feller, Harold H., 2739 N. Grand 63106
Fellhauer, Carl M., 1035 Bellevue 63117
Felts, James A., 660 S. Euclid 63110
Ferguson, Thomas B., 4989 Barnes Hospital Plaza 63110
Ferrendelli, James A., 660 S. Euclid 63110
Ferro, Anthony L., 6744 Clayton Rd. 63117
Ferry, Richard J., 141 N. Meramec 63105
Fetick, Paul G., 9730 E. Watson Rd. 63126
Finger, Donald H., 522 N. New Ballas Rd. 63141
Fink, LeRoy L., 1245 Graham Rd., Florissant 63031
Finn, Murray E., 1035 Bellevue 63117
Finnegan, Joseph V., 1035 Bellevue 63117
Fischer, Charles K., 4355 Maryland 63108
Fischer, Erich, 7448 Ahern 63130
Fish, Virgil O., 2500 Town & Country La. 63131
Fishman, Marvin A., 500 S. Kingshighway 63110
Fitch, Coy D., 1325 S. Grand Blvd. 63104
FitzGerald, Leo P., 8420 Delmar 63124
Fitzgerald, William T., 3915 Watson Rd. 63109
Fivian, Gerald J., 2821 N. Ballas Rd. 63131
Flance, Israel J., 4652 Maryland 63108
Flanigan, George D., Jr., 4511 Forest Park 63108
Flavan, David B., 607 N. Grand 63103
Fleishman, Alfred, 2428 Woodson Rd 63114
Florendo, Purificacion T., 5505 Delmar 63112
Flores-Vega, Carlos H., 3915 Watson Rd. 63109
Flotte, Bernard H., Northland Medical Bldg. 63136
Flotte, Sylvester A., 11115 New Halls Ferry Rd., Florissant 63033
Flynn, Edward P., 9730 E. Watson Rd. 63126
Flynn, John T., 3211 S. Grand 63118
Flynn, Joseph E., 621 S. New Ballas Rd. 63141
Fogarty, William M., Jr., 3915 Watson Rd. 63109
Ford, Lee T., Jr., 885 Briar Hill Rd., East St. Louis, Ill. 62203
Forsen, James A., Gower 64454
Forster, Armand C., 700 W. Essex 63122
Forti, John J., 1434 Chambers Rd. 63135
Fox, Robert E., 6744 Clayton Rd. 63117
Frank, Alvin R., 7457 Cromwell Dr. 63105
Franklin, Max S., 1040 Mason Rd., North 63141
Fraser, Daniel M., 1035 Bellevue 63117
Frawley, Thomas F., 1325 S. Grand 63104
Frederick, Raymond O., 55 Ridgemoor Dr. 63105
Freedman, Harold, 4910 Forest Park Blvd. 63108
Freedman, Ruth S., 4910 Forest Park Blvd. 63108
Freeman, David M., 7316 Kingsbury 63105
Freiman, S. Michael, 8631 Delmar 63124
Freimuth, Louis E., 607 N. Grand 63103
Freund, Samuel J., 8515 Delmar 63124
Friedman, Bernard, 4511 Forest Park Blvd. 63108
Friedman, Paul L., 7332 Cornell 63130
Friedrich, Ernst R., 4911 Barnes Hospital Plaza 63110
Fries, Armand D., 812 Olive 63101
Fries, John W., 3520 Chippewa 63118
Friskel, Arthur K., 7422 Devonshire 63119
Frumson, Guy H., Northland Medical Bldg. 63136
Fryer, Minot P., 4989 Barnes Hospital Plaza 63110
Fujita, Milton T., 6420 Murdoch Ave. 63109
Fuleihan, Farid, Barnes Hospital Plaza 63110
Funsch, Robert E., 6744 Clayton Rd. 63117
Furla, Gus J., 57 Broadview Dr. 63105
Furlow, Leonard T., Rt. No. 1, Box 202 Crystal River, Fla. 32629
Gaffney, Caldwell J., 4959 Northland Pl. 63113
Gafney, George T., 7364 Pershing 63130
Gagliardo, Joseph, 141 N. Meramec 63105
Gallagher, Neil I., 869 Rampart Dr. 63122
Gandlmayr, Jack M., 1040 N. Mason Rd. 63141
Gansloser, Wilbert M., 950 Francis Pl. 63105
Gantner, George E., Jr., 1325 S. Grand 63104
Gantz, John A., #10 Muirfield 63141
Garcia, Francisco, 7687 Lindbergh 63117
Garfinkel, Bernard T., 4511 Forest Park Blvd. 63108
Gass, Michael, P.O. Box 5, Adidome, V. R. Ghana
Gaston, Lamont W., 1310 S. Grand Blvd. 63104
Gearhart, David L., 615 S. New Ballas Rd. 63141
Gedney, William B., 806 Meramec Station Rd. Valley Park 63088
Geha, Alexander S., P.O. Box 14109 63178
Geise, August W., Jr., 5505 Delmar 63112
Gentsch, Kenneth W., 65 Fredrick Lane, Glendale 63122
Germuth, Frederick G., Jr., 615 S. New Ballas Rd. 63141
Gerst, Aloysius C., 11115 New Halls Ferry Rd., Florissant 63033
Giannellis, C., 1035 Bellevue 63117
Gibson, Helen F., 40 Plaza Sq. 63103
Gildea, Edwin F., 4940 Audubon 63110
Gildea, Margaret C. L., 100 N. Euclid Ave., Suite 310 63108
Gilden, Jerome J., 4919 Forest Park Blvd. 63108
Gillespie, William J., 200 S. Hanley 63105
Gilpin, Doris C., 7452 Amherst 63130
Gilula, Louis A., 17 Sona Lane 63141
Giraparnont, Bang Orn, 601 S. Brentwood, Clayton 63105
Gladney, John H., 3737 N. Kingshighway 63115
Gnade, Albert J., 3606 Gravois 63116
Goebel, Joan M., 5128 Jamieson 63109
Goell, Robert S., 100 N. Euclid 63108
Goldenberg, Sidney, 8515 Delmar, University City 63124
Goldenson, Max J., 8631 Delmar 63124
Goldfarb, Alvin, 212 Rondelay Ct. 63141
Goldman, Alfred, 8631 Delmar 63124
Goldman, Arnold M., 522 N. New Ballas Rd. 63141
Goldman, Melvin L., 8631 Delmar 63124
Goldring, Sidney, 660 S. Euclid 63110
Goldstein, Marcy A., 6984 Cornell 63130
Gomez, Cesar A., Jr., 9440 Midland 63114
Goodwin, Donald W., 4940 Audubon Ave. 63110
Gorla, Wayne O., 330 Northland Medical Bldg. 63136
Gowler, Douglas R., 111 S. Meramec 63105
Graff, Ralph J., P.O. Box 14109 63178
Graneto, Joseph A., 5521 S. Broadway 63111
Grant, John M., 114 N. Taylor 63108
Grant, Neville, 114 N. Taylor 63108
Grant, Samuel B., 114 N. Taylor 63108
Graul, Elmer G., 2838 S. Grand Blvd. 63118
Graul, Walter P., Northland Medical Bldg. 63136
Gray, Mary Louise, 1325 S. Grand 63104
Grebel, Clement B., 16 Hampton Village Plaza 63109
Green, Morton R., 301 W. Lincoln, Belleville, Ill. 62220
Green, William R., 7200 Manchester 63143
Gregory, John G., 1325 S. Grand 63104
Gresick, Robert J., 11 Coach-N-4 63131
Griege, Charles W., 493 St. Francois, Florissant 63031
Griggs, James Y., 1400 Fawnvalley Dr. 63131
Grindon, Joseph B., 1035 Bellevue 63117
Gruenfeld, Gerhard E., 6307 Alexander 63105
Guccione, Joseph B., 1040 N. Mason Rd. 63141
Gulick, Charles R., 100 N. Euclid 63108
Gummels, Belmont B., 7359 Dale 63117
Gunn, Walter T., 4617 Dahlia 63116
Guze, Samuel B., 4940 Audubon 63110
Haddock, James N., 111 Firwood Dr. 63119
Haffner, Heinz, 4989 Barnes Hosp. Plaza 63110
Hagan, Daniel J., 615 S. New Ballas Rd. 63141
Hagebusch, Omer E., 11636 Administration Dr., Creve Coeur 63141
Hall, Lee A., 35 N. Central 63105
Hall, Preston C., 1827 S. 39th St. 63110
Hall, Robert A., 43 Washington Ter. 63112
Hall, William K., P.O. Box 661, St. Charles 63301
Halley, Robert H., 1245 Graham Rd., Florissant 63031
Halloran, Mark J., 621 S. New Ballas Rd. 63141
Hamilton, Caldwell K., 11745 Olive St. Rd. 63141
Hamilton, Eugene G., 950 Francis Pl. 63105
Hamilton, Thomas R., 3006 E. First, Duluth, Minn. 55812
Hamilton, Wm. P., 615 S. New Ballas Rd. 63141
Hammond, David T., 114 N. Taylor 63108
Hampton, Henry E., 2345 Pine 63103
Hampton, Stanley F., 6744 Clayton Rd. 63117
Hankin, Norman M., 4233 Sulphur 63109
Hanna, Richard E., 539 Westview Dr. 63130
Hansel, French K., 6828 Oakland at Skinker Blvd. 63139
Hanser, Theodore H., 3555 Sunset Office Dr. 63127
Harell, Alex, 1040 N. Mason Rd. 63141

° Doctor of Osteopathy.

Harford, Carl G., Dept. of Medicine, Washington University 63110
Harkins, William B., 3720 Washington 63108
Harper, Fleming B., 4989 Barnes Hospital Plaza 63110
Harris, Solon P., 6826 Natural Bridge Ave. 63134
Harrison, Lee B., 44 Ridgemoor Dr. 63105
Harrison, Richard L., 9701 U.S. Highway 66, Crestwood 63126
Harting, Hugh R., 777 S. New Ballas Rd. 63141
Hartman, Paul T., 6376 Clayton Rd. 63117
Hartnett, Leo J., 6744 Clayton Rd. 63117
Hartnett, Thomas D., P.O. Box 14109, 63178
Hartstein, Jack, 8631 Delmar 63124
Hartwig, John A., 607 N. Grand 63103
Hatfalvi, Bela I., 15 Middlesex Dr. 63117
Hawk, Bray O., 16 Hampton Village Plaza 63109
Hawker, William D., 77 Willmore Rd. 63109
Hawkins, George L., Jr., 5505 Delmar 63112
Hayek, Wesley E., 11115 New Halls Ferry Rd., Florissant 63033
Haynes, James W., 135 W. Adams 63122
Headrick, John A., 1125 Graham Rd., Florissant 63031
Heifetz, Carl J., 4511 Forest Park Blvd. 63108
Heins, James N., 4960 Audubon Ave. 63110
Hellweg, Raymond W., 3220 Parker Rd., Florissant 63033
Henderlite, John W., 11927 Spruce Haven Ct. 63141
Hennelly, John J., 6500 Chippewa 63109
Henschel, Eugene V., 55 Broadview Dr. 63105
Her, Kyu Sook, 1601 Beaucaire Dr. 63122
Herman, Morris, 3555 Sunset Office Dr. 63127
Hernandez, Salvador, 6500 Chippewa 63109
Hertel, Ronald C., 35 N. Central Ave. 63105
Heusler, Anton F., Northland Medical Bldg. 63136
Heutel, Lee B., 7200 Manchester 63143
Hickey, James L., 621 S. New Ballas Rd. 63141
Hicks, Robert S., 100 N. Euclid, Suite 310 63108
Higgins, Philip C., 1 Claychester 63131
Hightower, Harry G., 4524 Forest Park 63108
Hilbert, Paul H., 2905 Cherokee 63118
Hildreth, H. Rommel, 950 Francis Pl. 63105
Hill, XaCadene A., 4067 Dr. Martin Luther King Dr. 63113
Hilliard, Alphonso W., 4451 Natural Bridge Ave. 63115
Hillman, Richard E., 500 S. Kingshighway 63110
Hironimus, John, 6651 Chippewa 63109
Hodgson, Sheila E., 510 S. Kingshighway 63110
Hoffmann, Augustin D., 6500 Chippewa 63109
Hoffmann, Ronald E., Northland Medical Bldg. 63136
Hofling, Charles K., 1221 S. Grand Blvd. 63104
Hofstatter, Leopold, 768 Glen Vista Dr. 63122
Hogan, Cornelius E., 1615 S. Grand Ave. 63104
Hogan, John R., 67 Berry Rd. Park 63122
Hogan, Patrick A., 6376 Clayton 63117
Hogan, Patrick C., 2623 Telegraph Rd. 63125
Holbrook, Charles K., 9901 Diamond Dr. 63115
Holemon, R. Eugene, 12 Ridge Creek 63141
Hollo, Vencel W., 906 Olive 63101
Hollocher, Richard J., 777 S. New Ballas Rd., Suite 200 E., Creve Coeur 63141
Holloway, Robert B., 915 N. Grand Blvd. 63106
Holt, Earl P., Jr., 30 Brentmoor Pk. 63105
Holt, William E., 4524 Forest Park Blvd. 63108
Holtz, Alan S., 135 W. Adams 63122
Hoover, Bernard L., 3915 Watson Rd., 63109
Horenstein, Simon, 1221 S. Grand 63104
Horner, John L., 114 N. Taylor 63108
Horwitz, Irwin B., 4919 Forest Park Blvd. 63108
Houston, Vincent T., 7820 Carondelet 63105
Hovadhanakul, Praphat, 1325 S. Grand 63104
Huck, Richard F., 2821 N. Ballas Rd. 63131
Huggins, Albert M., 6651 Chippewa 63109
Hulbert, Bernard, 8112 Delmar 63130
Hummel, Anton J., 5203 Chippewa 63109
Hummel, William C., 13354 Thornhill Dr. 63131
Hunleth, Frank E., 6744 Clayton Rd. 63117
Hutchinson, James H., Jr., 114 N. Taylor 63108
Hutchinson, William B., 2821 N. Ballas Rd. 63131
Hutto, A. Herman, 100 N. Euclid 63108
Hyman, Anna, 945 Glenway 63122
Idewu, Olawale O., 1325 S. Grand Blvd. 63104
Inkley, John J., 5203 Chippewa 63109
Inman, Max M., 3915 Watson Rd. 63109
Irvin, William M., 1035 Bellevue 63117
Ishida, Yasuo, 1310 S. Grand 63104
Ittner, George W., Jr., 5505 Delmar 63112
Jablonski, Raymond C., 3rd & 1st Capitol Dr., St. Charles 63301
Jacob, Karl A., Jr., 621 S. Ballas Rd. 63141
Jacobs, Charles C., 43 Muirfield Lane 63141
Jaeckle, Richard G., 4511 Forest Park 63108
Jaffe, Bernard M., 4960 Audubon 63110
Jahanian, Iraj, VA Center, Leavenworth, Kan. 66048
Janney, James G., Jr., 911 S. Brentwood Blvd. 63105
Jaramillo, Jaime, 5400 Arsenal 63139
Jaudon, Joseph C., 12912 Topping Estates Dr. 63131
Jean, J. Ted, 4989 Barnes Hospital Plaza 63110
Jensen, Joshua E., 1245 Graham Rd., Florissant 63031
Joffe, William S., 211 N. Meramec 63105
Johnson, Charles Julius, 1035 Bellevue 63117
Johnson, Maurice N., 800 N. Lindbergh 63141
Johnson, Mitchell D., 40 N. Florissant Rd. 63135
Johnston, Glen P., 5103 Queeny Towers 63110
Johnstone, John, Jr., 206 W. Argonne Dr. 63122
Jones, Andrew B., Rt. 1, Soddy, Tenn. 37379
Jones, Augustin, 3720 Washington 63108
Jones, Grey, Eminence 65466
Jones, James B., 9335 Sonora Ave. 63144
Jones, James D., Barnes Hosp. Plaza 63110
Jones, James H., 1035 Bellevue Ave. 63117
Jones, Otey S., 3616 S. Broadway 63118
Jones, Richard A., 777 S. New Ballas Rd. 63141
Jones, Vincent L., 634 N. Grand 63103
Jordan, Walter R., Box 626, Grapeland, Tex. 75844
Joseph, Harold J., 828 Cella Road 63124
Joslyn, Harold L., 634 N. Grand 63103
Jost, Charles A., 11115 New Halls Ferry Rd., Florissant 63033
Judd, Donald, 911 South Brentwood 63105
Judy, Joseph, 1115 New Halls Ferry Rd., Florissant 63033
Juergens, William G., 100 N. Euclid Ave. 63108
Kairuz, Bartolome C., 3533 Ritz Center 63125
Kaiser, George C., 1325 S. Grand 63104
Kamakas, Nicholas C., 1245 Graham Rd., Florissant 63031
Kamenetsky, Stephen A., 7126 N. 19th Ave., #177, Phoenix, Ariz. 85021
Kaminski, Donald L., 1325 S. Grand 63104
Kaminsky, Watson W., 6744 Clayton Rd. 63117
Kane, Clyde E., 706 Walton 63108
Kang, Juan, 6150 Oakland 63139
Kao, Ming-Shian, 4911 Barnes Hospital Plaza 63110
Kaplan, Alex H., 4524 Forest Park Blvd. 63108
Kappesser, Netajean B., 55 Fair Oaks 63130
Kappesser, Roland C., 55 Fair Oaks 63130
Karandjeff, Apostle D., 1035 Bellevue Ave. 63117
Karl, Michael M., 4652 Maryland 63108
Kaskie, Clifford R., 500 Northwest Plaza, St. Ann 63074
Kaufman, Robert L., 500 S. Kingshighway 63110
Kayes, Jack, 712 S. Price Rd. 63124
Keeble, Charles B., 37 Villawood La. 63119
Keenoy, John J., 6405 Devonshire 63109
Keffler, Karl L., 7306 Wise 63117
Keller, Louis, 35 N. Central 63105
Keller, Maurice J., 3654 S. Grand Blvd. 63118
Kellett, John G., 243 Kenora Ct. 63119
Kelley, Robert W., 3720 Washington 63108
Kelly, John J., 114 N. Taylor 63108
Kelly, R. Emmet, 800 N. Lindburgh Blvd. 63166
Keltner, R. M., Jr., 1325 S. Grand Blvd. 63104
Kendig, John H., 621 S. Ballas Rd. 63141
Kerr, David N., 950 Francis Pl. 63105
Keyes, E. Lawrence, 900 S. Hanley Rd. 63105
Khan, M. Osman, 510 S. Kingshighway 63110
Khodadoust, Kavous, 1606 Grattan 63104
Kieffer, Victor B., Jr., 325 N. Kirkwood Rd. 63122
Kienzle, Edward C., 4075 S. Grand 63116
Kilo, Charles, 38 Countryside La. 63131
Kim, Chung Ki, 358 Ayant Dr., Hazelwood 63042
King, Francis C., 9929 Manchester 63122
King, James P., 4211 Bayles Ave. 63123
King, John V., 8005 Big Bend 63119
King, John V., Jr., TUSLOG, Dept. 47, Box 1814, APO, New York 09289
King, M. Kenton, 507 S. Euclid 63110
Kinney, Sam E., 4949 Forest Park 63108
Kinsella, Edward D., 1035 Bellevue, Richmond Heights 63117
Kinsella, Peter W., 6304 S. Grand 63111
Kinsella, Ralph A., Jr., 6305 Westminster Pl. 63105
Kinzie, Jeannie J., 510 S. Kingshighway 63110
Kinzie, Joseph L., Jr., P.O. Box 14109 63178
Kirstein, Melvin B., 4511 Forest Park Blvd. 63108
Kissane, John M., 660 S. Kingshighway 63110
Kistner, William F., 911 S. Brentwood Blvd. 63105
Klaus, Hanna, 1515 Lafayette 63104
Klein, Arnold G., 2632 S. Kingshighway 63139
Klein, Bert H., #8 Deacon Dr. 63131
Klein, Saul J., 100 N. Euclid 63108
Kleinschmidt, Clinton, 7624 Maryland 63105
Klenk, Charles L., 5927 Suson Pl. 63139
Klinge, Frederick W., 6651 Chippewa 63109
Klinkerfuss, George H., 660 S. Euclid 63110
Klippel, Bernhardt W., 6651 Chippewa 63109
Kloecker, Richard J., 500 Northwest Plaza, St. Ann 63074
Kloecker, Robert P., 9616 Lackland Rd. 63114
Kneal, E. Ellsworth, 621 S. New Ballas Rd. 63141
Knight, Franklin P., 11465 Fairlane Ct. 63136
Knight, William A., Jr., 1035 Bellevue 63117
Knowles, R. R., 5353 Pooks Hill Rd., Bethesda, Md. 20014
Knowlton, Norman P., Jr., 14 Oakleigh La. 63124
Kodner, Ira J., 216 S. Kingshighway 63110
Koehler, George A., 3654 So. Grand 63118
Koenig, Marvin I., 11115 New Halls Ferry Rd., Florissant 63033
Kohler, Louis H., 100 N. Euclid 63108
Kolker, Allan E., 660 S. Euclid Ave. 63110
Kolodny, Robert C., 4910 Forest Park 63108
Komanetsky, William M., 6817 Gravois 63116
Kopman, Ercument A., 4989 Barnes Hospital Plaza 63110
Kopp, Leonard J., 360 Laduemont 63141
Kopta, Joseph A., 4960 Audubon 63110
Korn, Robert L., 522 N. New Ballas Rd 63141
Kostianovsky, Jorge E., 58 Broadview Dr. 63105
Kotner, Lawrence M., 8515 Delmar, University City 63124
Koutsoumpas, William V., 3024 Hawthorne Blvd. 63104
Kovac, S. Robert, 777 S. New Ballas Rd. 63141
Kowert, Edward H., 100 N. Euclid 63108
Kozlowski, Albert E., 10283 Bauer Rd. 63128
Kramolowsky, Helmuth H., 7909 Camelot Lane 63123
Kraner, Justin F., 8515 Delmar Blvd., University City 63124
Krause, G. Lynn, Jr., 9740 Litzsinger Rd. 63124
Krebs, Joseph M., 2821 N. Ballas Rd. 63131

[°] Doctor of Osteopathy.

Kroe, Donald J., 1404 Sangamon Ct., Belleville, Ill. 62221
Krojanker, Rolf, 6651 Chippewa 63109
Kromer, Charles, 9101 Appomattox Ct. 63123
Kronemer, Norton S., 12660 Lamplighter Sq. 63128
Kuczer, Arnoldo, 4511 Forest Park Blvd. 63108
Kuebrich, Thomas C., 111 Church Rd. 63135
Kuhlman, Ralph, 100 N. Euclid Ave. 63108
Kuhlman, Robert E., 4989 Barnes Hospital Plaza 63110
Kuhn, Nobuko O., 6951 Delmar 63130
Kulak, Gary, 141 N. Meramec 63105
Kunawongsa, Nit, 1515 Lafayette Ave 63104
Kurz, Rudolph F., 1000 Milton Rd., Alton, Ill. 62005
Kusama, Harus, 1420 Grattan 63104
Kutryb, Walter J., 11115 New Halls Ferry Rd., Florissant 63033
Lacson, Leticia D., 1420 Grattan 63104
Lacy, Paul E., 660 S. Euclid 63110
Ladd, Charles B., 3438 S. Grand 63118
LaDriere, Raymond J., 11745 Olive St. Rd., Creve Coeur 63141
LaFerriere, Keith A., 5535 Delmar 63112
Lam, Ernesto S., 7943 Big Bend 63119
Lam, Robert L., 7777 Bonhomme 63105
Lamb, Wanda, 777 S. New Ballas Rd. 63141
Landau, William M., 640 S. Kingshighway 63110
Landry, J. Hubert, 2821 N. Ballas Rd. 63131
Lane, Clinton W., 3720 Washington 63108
Lane, Daniel K., 3720 Washington 63108
Lang, John J., 507 Fairways Circle 63141
Lange, Adolph C., 607 N. Grand 63103
Langenbach, Alfred M., 10012 Woodlawn Ave., Ladue 63124
Langlois, Paul J., 3720 Hampton Ave. 63109
Lanier, Earl W., 6000 W. Florissant 63120
Lansangan, Isaias, Box 796 E. Arnold 63010
Lanscbe, Elmer A., 8358 Racquet Dr. 63121
Larocca, Felix E. F., 7900 Natural Bridge Rd. 63121
Larsen, Kenneth V., Northland Medical Bldg. 63136
Larsen, Virginia L., 5800 Arsenal 63139
Larson, Paul U., 3654 S. Grand 63118
Lassar, Gilbert N., 6223 Natural Bridge Rd. 63121
Lattinville, Henry E., 11115 New Halls Ferry Rd., Florissant 63033
Lau, Luis, 1467 Reauville Dr. 63122
Lauer, John D., 555 High Meadow 63131
Laux, France A., 325 N. Kirkwood Rd. 63122
Lawrence, George H., 1820—9th St., Green Bay, Wisc. 54304
Lawton, John T., 150 N. Meramec Ave. 63105
Lawton, Lawrence M., 1040 N. Mason Rd. 63141
Leach, Wilfred, 1310 S. Grand Blvd. 63104
LeBlanc, Leo J., 3720 Washington 63108
L'Ecuyer, Jerome L., 9313 Manchester 63119
Lederman, Joseph, 2400 N. Grand 63106
Lee, Fransiska, 510 S. Kingshighway 63110
Lehman, Ralph A. W., 4200 E. Ninth Ave., Denver, Colo. 80220
Leightner, William, 550 Bedford 63130
Lembeck, Joseph A., 4103 Flora Place 63110
Lenobel, Milton I., 16 Granada Way 63105
Lerwick, Everett R., 2821 N. Ballas Rd. 63131
Levitt, Joseph, 8515 Delmar Blvd. 63124
Levy, Irwin, 4989 Barnes Hospital Plaza 63110
Levy, Jerome F., 4989 Barnes Hospital Plaza 63110
Levy, Morton A., 8515 Delmar Blvd., University City 63124
Lewis, Charles R., 1245 Graham Rd., Florissant 63031
Lewis, James E., Jr., 1401 S. Grand 63104
Leydig, Stanley M., 16 Hampton Village Plaza 63109
Liang, Howard S., 1429 Reauville Dr. 63122
Liao, Kun T., 11636 Administration Dr. 63141
Lieb, Francis X., 621 S. New Ballas Rd. 63141
Lieb, Otto, 1114 Dover Place 63111
Lieberman, David M., 4989 Barnes Hospital Plaza 63110
Liese, Grover B., 9971 Chileswood 63126
Lilly, Douglas R., 621 S. New Ballas Rd. 63141
Lindeman, Carl H., 52 Maryland Plaza 63108
Lindeman, John, 510 S. Kingshighway 63110
Ling, Walter, VA Hospital, Sepulveda, Calif. 91343
Link, Alexander J., 7215 Maryland 63130
Lipsitz, Ellis S., 4511 Forest Park Blvd. 63108
Liscber, Carl E., 4960 Audubon 63110
Little, Monroe H., 7830 Blackberry Ave. 63130
Littmann, Lewis E., 665 S. Skinker Blvd. 63105
Litzow, Louis T., 3654 S. Grand 63118
Liu, Paul I., VA Hospital, Kansas City 64128
Loeb, Virgil, Jr., 4989 Barnes Hospital Plaza 63110
Loeffel, Ellen S., 3654 S. Grand Blvd. 63118
Logie, MacDonald B., 100 N. Euclid 63108
Loitman, Bernard, 10 Washington Terr. 63112
Londe, Alan M., 4919 Forest Park Blvd. 63108
Londe, Sol, 7320 Colgate 63130
London, Stanley L., 4919 Forest Park Blvd. 63108
Lonergan, Warren M., 4910 Forest Park Blvd. 63108
Long, Frank B., 100 N. Euclid 63108
Lonsway, Maurice J., 8025 Dale Ave. 63117
Lonsway, Maurice J., Jr., 8025 Dale Ave. 63117
LoPiccolo, Vincent J., 1931 Marconi Ave. 63110
LoPiccolo, Vincent J., Jr., 2821 N. Ballas Rd. 63131
Lottes, James O., 6434 Chippewa 63109
Lowenstein, Paul S., 18 S. Kingshighway 63108
Lucido, Joseph L., 1035 Bellevue Ave. 63117
Luedde, Philip S., 4424 Hampton 63109
Lugo, Samuel, 1040 N. Mason Rd. 63141
Luh, Andrew, 4110 Von Talge Rd. 63128
Lum, Jon Tek, 1420 Grattan 63104
Lutz, Martin H., 31 Aylesbury Dr. 63132
Lyman, Edward H., 950 Francis Pl. 63105
Lynxwiler, Chester P., 3438 S. Grand 63118
Lyskowski, Maria, 141 N. Meramec 63105
Lyttle, Garnet C., 665 S. Skinker Blvd. 63105
McAdam, C. Rush, 7516 Florissant Rd. 63121
McAfee, C. Alan, 5505 Delmar 63112
McAlister, William H., 510 S. Kingshighway 63110
McCarroll, H. Relton, Jr., 4960 Audubon 63110
McCarthy, John M., 6744 Clayton Rd. 63117
McCaughan, John M., 4605 Lindell Blvd. 63108
McCloskey, R. Bruce, 6651 Chippewa 63109
McClure, James N., Jr., 4940 Audubon 63110
McConnell, Robert G., 1465 S. Grand 63104
McCool, James F., Jr., 3915 Watson Rd. 63109
McCool, Stanley G., 316 N. Newstead 63108
McCown, Allan H., 428 N. Dickson, Kirkwood 63122
McDonough, John, 5203 Chippewa 63109
McDowell, Richard L., 141 N. Meramec 63105
McFadden, James F., Sr., 7629 Wydown Blvd. 63105
McGinnis, Byron J., 1140 Forder Rd. 63129
McKinney, Joseph K., 100 N. Euclid Ave., Suite 310 63108
McLaughlin, Kathleen, 1824 Topping Rd. 63131
McLean, Harry A., 11636 Administration Dr. 63141
McNamara, John J., 21 Berkshire La. 63117
McSwiney, John G., 10 Adams St. 63135
MacDonald, Robert R., Jr., 60 Glen Cove Dr., Chesterfield 63017
Macdonald, William C., 6744 Clayton Rd. 63117
Macbek, Otakar, 6744 Clayton Rd. 63117
Macnish, James M., 4919 Forest Park Blvd. 63108
Madrid, Dominador, 23 Lincord 63128
Maginn, R. Reilly, 911 S. Brentwood Blvd. 63105
Maher, Thomas F., 615 S. New Ballas Rd. 63141
Maizus, Saul H., 40 N. Kingshighway 63108
Maloney, Robert M., 12 Bridle La. 63131
Maminta, Napoleon S., 2284 Whitby Rd., Chesterfield 63017
Manansala, Antonio Quito, 13335 Conway Rd. 63141
Manes, Jose, 1325 S. Grand 63104
Manganaro, Frank J., 1520 S. Brentwood 63144
Manion, Peter J., 3915 Brannon 63109
Manley, Charles B., Jr., 449 Sherwood Dr. 63119
Maranan, Diosdado L., 419 Couch Ave., Kirkwood 63122
Marban, Manual I., 447 Foote Ave. 63119
Martel, Dominique, 7344 Princeton 63130
Martin, Daniel J., 500 Northwest Plaza St. Ann 63074
Martin, J. Barlow, 9918 Warshire 63132
Martin, James M., 9380 Robyn Hills Dr. 63127
Massie, Edward, 9806 Litzsinger Rd. 63124
Masters, William H., 4910 Forest Park Blvd. 63108
Matthews, John G., 3707 Watson Rd. 63109
Maughs, Sydney B., 100 N. Euclid Ave., Suite 310 63108
Max, Paul F., 3720 Washington 63108
May, Mark, 517 S. Euclid Ave., 63110
Medler, Francis J., 4118 W. Florissant 63115
Mehan, Donald J., 1035 Bellevue 63117
Mehra, Ravinder B., 12600 Villa Hill 63141
Mehra, Usha, 12600 Villa Hill 63141
Meinberg, William H., 906 Olive 63101
Meiners, Paul N., 911 S. Brentwood 63105
Meiners, Theodore M., 6235 Waterman Blvd. 63130
Mejia, Hugo, 1515 Lafayette 63104
Melick, William F., 1035 Bellevue Ave., #205 63117
Mell, Roger L., 35 N. Central 63105
Mendelsohn, Robert S., 7438 Buckingham Dr. 63105
Mendez, Manuel M., 6424 Southland 63109
Mendonsa, Lawrence E., 9811 W. Florissant 63136
Menendez, Manuel F., 15189 Isleview Dr., Ballwin 63011
Menendez, Silvana, 15189 Isleview Dr., Ballwin 63011
Merenda, Sam J., 6651 Chippewa 63109
Mestres, Hugh M., 159 Concord Village Plaza 63128
Metz, Charles O., 6459 Devonshire Ave. 63109
Meyer, Herman M., 8515 Delmar 63124
Meyer, John S., P.O. Box 14109 63178
Meyer, Melvin E., 4424 Hampton Ave. 63109
Meyers, Elsie F., 6364 Alexander Dr. 63105
Meyers, John B., 120 N. Forsyth, Clayton 63105
Meyers, Robert W., 4524 Forest Park Blvd. 63108
Michael, Kenneth D., 4524 Forest Park Blvd. 63108
Michael, Vernon E., 812 Olive 63101
Michaelree, John F., Crestwood Bank Bldg. 63126
Mier, Thomas M., 1035 Bellevue 63117
Mill, Wm. B., Jr., 510 S. Kingshighway 63110
Miller, Edward J., 4919 Forest Park Ave. 63108
Miller, James E., 500 S. Kingshighway 63110
Miller, James R., 724 Timber Trail 63131
Miller, Jule P., Jr., 4524 Forest Park Blvd. 63108
Miller, Norman C., 3903 Park 63110
Miller, Robert N., Barnes Hospital Plaza 63110
Milstead, Kenneth L., Jr., 1325 S. Grand 63104
Milster, Clyde R., 906 Olive 63101
Mirbaha, Mitchell M., 634 N. Grand 63103
Mishkin, Marvin R., 4511 Forest Park Blvd. 63108
Miskovsky, Emil F., 911 S. Brentwood 63105
Missey, Wilburn C., Jr., 621 S. New Ballas Rd. 63141
Mitchell, Eugene, 2601 Whittier 63113
Monafo, William W., 615 S. New Ballas Rd. 63141
Montani, Charles, 5147 Daggett 63110
Montgomery, Austin F., 2821 N. Ballas Rd. 63131
Moore, Alva, 2814 N. Taylor 63115

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Morgan, Harry C., 515 Tecumseh Dr. 63141
Morgan, Stephan S., 16 Hampton Village Plaza 63109
Morrin, Kevin C., 5251 Westminster Place 63108
Morris, Alan H., 4511 Forest Park Blvd. 63108
Morris, Harvey E., 433 Powell 63135
Morris, Mary E., 607 N. Grand 63103
Morris, R. William, 6420 Clayton Rd. 63117
Morrison, Arlen, 2821 N. Ballas Rd. 63131
Morrissey, James D., 4255 Pacific Ave., Suite 7, Stockton, Calif. 95207
Mortensen, Frede, 3555 Sunset Office Dr. 63127
Moses, Robert A., 640 S. Kingshighway 63110
Motzel, Albert J., 6238 Washington 63130
Mountjoy, Grace S., 20 Southmoor Dr. 63105
Mowrey, William O., Northland Medical Bldg. 63136
Muckerman, Richard I. C., 621 S. New Ballas Rd. 63141
Mudd, J. Gerard, 1325 S. Grand Blvd. 63104
Muelheims, Gerhard H., 1515 Lafayette Ave. 63104
Mueller, Clarence E., 634 N. Grand 63103
Mueller, Joseph A., 3654 S. Grand 63118
Mueller, Morris A., 11 Long Meadows 63131
Mueller, Robert, 812 Olive 63101
Mueller, Wilbur K., 1160 S. McKnight 63132
Muether, Raymond O., 6744 Clayton Rd. 63117
Mulligan, Leo V., 6744 Clayton Rd. 63117
Mullins, John E., 3654 S. Grand 63118
Munsch, Girard A., 141 N. Meramec 63105
Murdock, Nathaniel H., 4901 A Easton 63113
Murphy, George E., 4940 Audubon 63110
Murphy, James P., 911 S. Brentwood Blvd. 63105
Murphy, Michael G., 1325 S. Grand Ave. 63104
Murphy, Paul, 634 N. Grand 63103
Muschany, Norman K., 52 Maryland Plaza 63108
Nahm, Chung Chick, 9 Ladue Manor, Ladue 63124
Nalagan, Marcos C., 6651 Chippewa 63109
Naryka, Joseph J., 1035 Bellevue Ave. #205 63117
Nash, Helen E., 1441 N. Grand 63106
Near, David M., 1125 Graham Rd., Florissant 63031
Nelson, James S., 1402 S. Grand 63104
Nemec, Stanley S., 6500 Chippewa 63109
Nester, Charles A., 3921 Federer Pl. 63116
Neun, William F., 5862 Delor 63109
Newman, Percy, 1109 N. Hanley Rd. 63130
Newmark, Leonard N., 777 S. New Ballas Rd. 63141
Newton, Gordon, 100 N. Euclid 63108
Newton, William T., 600 S. Kingshighway 63110
Nickel, James F., 621 S. New Ballas Rd. 63141
Nicolai, Charles H., Clayton & Ballas Rds. 63131
Niedermeyer, George J., 6744 Clayton Rd. 63117
Niesen, Frank J., 6500 Chippewa 63109
Nigh, Charles A., 3915 Watson Rd. 63109
Nishi, Toshio, 3071 Andover Dr. 63121
Nolan, Charles J., 18 Bellerive Acres 63121
Nomura, Roy M. Y., 141 N. Meramec 63105
Norland, Charles C., 114 N. Taylor Ave. 63108
Nouri, Hassan, 12622 Alswell La. 63128
Nye, Robert S., 3201 Arsenal 63118
Oakley, Margaret M., 407 Steeplechase Lane 63131
Obermeyer, Charles G., 3957 Holly Hills Blvd. 63116
O'Brien, Edward C., 1107 Childress 63139
O'Brien, Robert M., 777 S. New Ballas Rd. 63141
O'Donnell, Joseph V., 1661 Dunmorr 63131
O'Dowd, James A., 2919 S. Kingshighway 63139
Oetter, Donald L., 1040 Mason Rd., North 63141
Ognyanov, V. F., 551 White Rose La. 63132
Ogura, Joseph H., 1038 Winwood Dr. 63124
Ohmoto, Masao, 3720 Washington 63108
Ojascastro, Alejandro C., 11727 Doverhill Dr. 63128
Okun, Edward, 4989 Barnes Hospital Plaza 63110
O'Leary, James L., 660 S. Kingshighway 63110
Olmsted, William H., 4400 Lindell Blvd. 63108
Olney, John W., 4940 Audubon Ave. 63110
Olson, Robert E., 1402 S. Grand Blvd. 63104
O'Neal, Lawrence W., 35 N. Central 63105
Onken, Henry D., 106 Aberdeen 63105
Oppenheimer, Henry E., 141 N. Meramec 63105
O'Reilly, D. Elliott, 9054 Clayton Rd. 63117
Orenstein, Joseph M., 417 Jackson Ave., University City 63130
Orgel, M. Norman, 100 N. Euclid 63108
Orgel, Michael, 100 N. Euclid 63108
Orsay, Paul K., 105 Northland Med. Bldg., Jennings 63136
Ortiguero, Leopoldo M., 10577 Windswept Dr. 63128
Ortmeyer, Leroy F., 2623 Telegraph Rd. 63125
Ostapowicz, Frank, 1325 S. Grand Blvd. 63104
O'Sullivan, Daniel F., 16 Hampton Village Plaza 63109
O'Sullivan, George A., 421 Schirmer 63111
Ott, F. Thomas, 3 Hill Dr., Glendale 63122
Ott, Harold J., 60 Berkshire 63117
Owen, Robert F., 12 Hacienda Dr. 63124
Ozmat, Orhan, 4 Ladue Crest Lane 63124
Packman, Robert C., 4652 Maryland 63108
Padilla, Teresita C., 1045-D Old Towne Dr. 63132
Paine, Robert, P. O. Box 9549, Cabanne Station 63108
Palazzo, Frank A., 6744 Clayton Rd. 63117
Paletta, Francis X., 1035 Bellevue 63117
Paletta, Theodore L., 1040 Mason Rd., North 63141
Palmer, Lily Ann, 248 Rosemont, Webster Groves 63119
Pangilinan, Antonio G., 3354 N. Cramer, Milwaukee, Wis. 53211
Pappolardo, Carlos, 35 N. Central Ave. 63105
Parato, John M., 1755 S. Grand Blvd. 63104
Park, Duk Jae, 1515 Lafayette 63104
Parker, Thomas W., 7298 Greenway Dr. 63130
Parker, William, 611 Olive 63101
Parsi, Manutchehr K., 600 N. Union 63108
Parsons, Richard P., 777 S. New Ballas Rd. 63141
Passanante, Bartholomew M., 15 King Lynn 63132
Patrick, Roman L., Jr., 11636 Administration Dr. 63141
Patton, Douglas S., 1325 S. Grand 63104
Payne, Meredith J., 7314 Westmoreland Dr. 63130
Payne, Vaughn C., 1423 N. Grand 63106
Pearlman, Alan L., 660 S. Euclid 63110
Peden, Burnet W., 35 N. Central 63105
Peden, James C., Jr., 621 S. New Ballas Rd. 63141
Peden, Joseph C., 634 N. Grand 63103
Peden, Joseph C., Jr., 5505 Delmar 63112
Pedersen, Harold J., 990 Mansion Hill, Ballwin 63011
Pelz, Mort D., c/o Martin Toybes, 1116 Chantal La. 63132
Penilla, Antonio R., 1035 Bellevue 63117
Pennington, F. Eugene, 27 Log Cabin Dr. 63124
Pepper, Edward G., 6150 Oakland Ave. 63139
Pepper, Max, 1454 S. Grand 63104
Perez, Blanca M., P.O. Box 14109 63178
Perez, Carlos Alberto, 510 S. Kingshighway 63110
Perez, Raul A., 10510 Hackamore La. 63128
Perkins, David E., 100 N. Euclid 63108
Perkoff, Gerald T., 4550 Scott Ave. 63110
Pernoud, Flavius G., Jr., 1035 Bellevue 63117
Pernoud, Michael F., 1035 Bellevue 63117
Perry, H. Mitchell, 1983 Karlin Dr. 63131
Pfeifer, Oliver C., 6567 Murdoch 63109
Phillips, Granville J., Jr., 3411 Sirius, El Paso, Texas 79904
Phillips, John J., 114 Northland Med. Bldg. 63136
Phillips, William J., 114 N. Taylor 63108
Philpott, Gordon W., Barnes Hospital Plaza 63110
Piccione, Leonard M., 4466 W. Pine Blvd. 63108
Pilla, Lawrence A., 6228 Westway Pl. 63109
Pineda, Hector O., 5203 Chippewa 63109
Piper, August T., 4503 Easton 63113
Pitsinger, Nolan B., 5505 Delmar 63112
Pittman, Susan, 777 S. New Ballas 63141
Pitts, Ferris N., Jr., 1035 Bellevue 63117
Pizzimbono, Carlos A., 601 S. Brentwood 63105
Plax, Steven, 8025 Dale 63117
Plesons, John D., 3632 Bates 63116
Plumpe, W. Tupper, 3933 S. Grand 63116
Pojanasomboon, Pichat, 1318 Truman, Rolla 65401
Porporis, Arthur A., 100 N. Euclid 63108
Portugal, Antonio Q., 6500 Chippewa 63109
Portuondo, B. C., 3532 Flora Ct. 63104
Post, John R., Post Drive, Washington 63090
Post, Lawrence T., Jr., 211 N. Meramec 63105
Post, Stephen L., 100 N. Euclid 63108
Potashnick, Robert, 911 S. Brentwood 63105
Potchen, E. James, 510 S. Kingshighway Blvd. 63110
Potter, Reese H., 100 N. Euclid 63108
Powell, Earl A., 6500 Chippewa 63109
Powers, Pierce W., 5203 Chippewa 63109
Powers, William E., 510 S. Kingshighway 63108
Pratt, Lindsay L., Barnes Hospital Plaza 63110
Prensky, Arthur L., 500 S. Kingshighway 63110
Presant, Cary A., 8914 Eager Rd. 63144
Presnell, Cleitus A., 6744 Clayton Rd. 63117
Price, Kenneth C., 52 Maryland Ave. 63108
Probstein, Jacob, 4943 Lindell Blvd. 63108
Prophete, B., 3737 N. Kingshighway 63115
Proskey, Vincent J., 522 N. New Ballas Rd. 63141
Pruett, Burchard S., 10321 Richview Dr. 63127
Pruett, Don S., 49 Rye La. 63132
Pruett, Hubert S., 7449 W. Florissant 63120
Pugh, Daniel D., 1420 Grattan 63104
Purcell, Harry K., 911 S. Brentwood Blvd. 63105
Pyne, Herbert S., 6651 Chippewa 63109
Quick, Richard T., 9821 Copper Hill Rd. 63124
Rader, Edward S., 7744 Davis Dr. 63105
Rader, George B., 5505 Delmar 63112
Radke, John D., 3915 Watson Rd. 63109
Rahman, Moududur, 1402 S. Grand 63104
Rainey, Robert, 5165 Lindell Blvd. 63108
Ramirez, Samuel G., 7449 W. Florissant 63136
Ramsey, Robert H., 11115 New Halls Ferry Rd., Florissant 63033
Randolph, Bernard C., 3737 N. Kingshighway 63115
Rankin, Diane, 369 N. Taylor 63108
Rappold, H. O., 500 Northwest Plaza, St. Ann 63074
Raybuck, Harry E., 4511 Forest Park Blvd. 63108
Raza, Syed A., 5400 Arsenal 63139
Razek, A., 500 S. Kingshighway 63110
Recano, Ricardo Q., 3520 Chippewa 63118
Reed, Jonathan R., 4451 Natural Bridge Rd. 63115
Reese, Lester T., 522 N. New Ballas Rd. 63141
Reh, Edward P., 6744 Clayton Rd. 63117
Reich, Harry A., 5100 Tamm 63109
Reichert, M. Cecilia, 10063 Elise Dr. 63123
Reider, Richard A., 353 Rue Renee, Warson Woods 63122
Reineck, John A., 4906 S.W. Ave. 63110
Reisler, David M., 100 N. Euclid 63108
Rendleman, George F., 812 Olive St. 63101
Rendleman, George, Jr., 812 Olive 63101
Reuter, Louis A., 2739 N. Grand 63106
Reyes, Jose T., 455 Steeple Chase 63131
Reyes, Luis A., 9814 Mar-Ann Ct. 63128
Reyes, Rosendo A., 10157 Hausfel Ct. 63128
Reynolds, Fred C., 4960 Audubon Ave. 63110
Rhee, Dong S., 1325 S. Grand 63104
Rhee, Seoung Eun, 7429 Ethel Ave. 63117
Rhee, Young Wung, 1420 Grattan 63104
Richards, Frank O., 3737 N. Kingshighway 63115
Richman, Elmer, Rt. #3, Box 29, Chesterfield 63017
Ridgeway, William G., 7009 Weil Ave. 63119
Ries, Douglas A., 950 Francis Pl. 63105
Riley, John J., 6807 W. Florissant 63120
Ring, Edward M., 35 N. Central 63105
Ritchie, Frances R., 2609 S. Grand Blvd. 63118
Ritter, Hubert A., 1035 Bellevue 63117
Ritter, Paul J., 1035 Bellevue 63117
Rizzo, Adolfo E., 9216 Clayton Rd. 63124

° Doctor of Osteopathy.

Rizzo, Marco, 1325 S. Grand 63104
Robben, G. Garry, 2821 N. Ballas Rd. 63131
Robins, Eli, 600 S. Kingshighway 63110
Roche, Maurice B., 615 S. New Ballas Rd. 63141
Rodriguez, Ubaldo R., 2650 Telegraph Rd. 63125
Roper, Charles L., 46 York Dr. 63144
Rose, Dalton K., 203 Linden 63105
Rosecan, Marvin, 4910 Forest Park Blvd. 63108
[*]Rosell, Louis V., 7520 Natural Bridge 63121
Rosenbaum, Harry D., 4511 Forest Park Blvd. 63108
Rosenbaum, Herbert E., 100 N. Euclid Ave. 63108
Rosenfeld, Henry, 1209 Bethesda Ave. 63117
Rosenthal, Ronald E., 4960 Audubon Ave. 63110
Roth, John J., 634 N. Grand 63103
Rothman, David, 2821 N. Ballas Rd. 63131
Rothweiler, Robert J., 11745 Olive Blvd. 63141
Roulhac, George E., 5505 Delmar 63112
Roush, George Jr., 800 N. Lindbergh 63166
Roy, Joseph A., Northland Medical Bldg. 63136
Royce, Robert K., Barnes Hospital Plaza 63110
Royston, Grandison D., Route #3, Hope, Ark. 71801
Rudi, Herbert J., 3606 Gravois 63116
Runez, Manuel W., 6150 Oakland 63139
Rusan, Thomas E., 2900 S. Brentwood Blvd. 63144
Russell, Herman E., 8306 Pepperidge Dr. 63134
Ryan, Robert E., 621 S. New Ballas Rd. 63141
Sachar, Leo A., 4511 Forest Park Blvd. 63108
Safdar, Shabbir, 915 N. Grand 63106
Saghir, Marcel, 4940 Audubon Ave. 63110
Saha, Nitai C., 620 Packford, Ballwin 63011
St. John, Thomas C., 5107 Donovan 63109
Salanga, P. B., 8321 N. Broadway 63147
Sale, Llewellyn, Jr., 4910 Forest Park Blvd. 63108
Salmon, Mickey L., 3916 Ritz Center 63125
Sammons, Harry C., 128 W. Jewel 63122
Sanchez, Abelardo B., 3816 Swiss Dr. 63129
Sanders, Robert D., 4212 Flora Pl. 63110
Sanders, Theodore E., 100 N. Euclid 63108
Santanello, William M., 144 Parr, Fairview Heights, Ill. 62208
Sarma, Kurella T., 1010 Lacouer Dr. 63122
Sasser, William F., 621 S. New Ballas Rd. 63141
Sato, George, 369 Halcyon Dr. 63122
Sauer, Donald C., 4422 Westminster 63108
Sauer, W. Nicholas, 3720 Washington 63108
Sauvage, Jacques, 4911 Barnes Hospital Plaza 63110
Savci, Hasan D., 11712 Westham Dr. 63131
Sawyer, James, 111 Church Dr. 63135
Schaan, Robert C., 6651 Chippewa 63109
Schaefer, George J., 1112 Surrey Hills Dr. 63117
Schaefer, Glennon S., Jr., 1333 Topping Rd. 63131
Schaper, Ernest H., 7200 Manchester Ave. 63117
Scheer, George E., 35 N. Central 63105
Scheff, Harold, 777 S. New Ballas Rd. 63141
Scheibe, Robert G., 777 S. New Ballas Rd. 63141
Schengber, John S., 1221 S. Grand Blvd. 63104
Schierman, William D., 911 S. Brentwood 63105
Schmidt, Dennis A., 6150 Oakland 63139
Schmidt, Edwin H., 6651 Chippewa 63109
Schmiemeier, Roy H., 10220 Schuessler Rd. 63128
Schoeck, Albert F., 578 Westborough Pl. 63119
Schoedinger, George R., III, 2821 N. Ballas Rd. 63131
Schoenberg, Harry W., 1325 S. Grand Blvd. 63104
Schranck, Charles R., 28 Berkshire 63117
Schroeder, Henry A., #9 Belmont Ave., West Brattleboro, Vt. 05301
Schuessler, Wolfgang P., 6744 Clayton Rd. 63117
Schultz, Irwin, 9311 Duenke Dr. 63137
Schwartz, Frederick O., 15 Tealwood, Creve Coeur 63141
Schwartz, Henry G., 600 S. Kingshighway 63110
Schweiss, John F., 1414 Westwind Dr. 63131
Sciortino, Gaspare, 1019 Laval Dr. 63132
Sciortino, John S., 3720 Washington 63108
Scopelite, Joseph A., 607 N. Grand 63103
Scott, Elwin P., 3325 S. Grand Ave. 63118
Scott, Horace W., 100 N. Euclid 63108
Seddon, John W., 4989 Barnes Hospital Plaza 63110
Seeley, James J., 6651 Chippewa 63109
Seib, George A., 2323 Lafayette 63104
Sengupta, Dipak K., 1755 S. Grand 63104
Senturia, Ben H., 4511 Forest Park Blvd. 63108
Senturia, Hyman, 4511 Forest Park Blvd. 63108
Sertl, James F., 1205 Dunloe Rd., Ballwin 63011
Sertl, John D., 3739 Gravois 63116
Sessions, Donald G., 517 S. Euclid Ave. 63110
Sethabutra, Chaisiri, 3820 Itaska Apt. 2 63116
Sevastianos, Aristides E., 7521 W. Florissant 63136
Sevin, Omar R., 45 Briar Cliff, Rockhall, Md. 21661
Sexton, Daniel L., 911 S. Brentwood Blvd. 63105
Sexton, Elmer E., 812 Olive 63101
Shackelford, Horace H., 4475 West Pine Blvd. 63108
Shah, Anwar, 1035 Bellevue Ave. 63117
Shah, Naheed F., 1035 Bellevue 63117
Shahan, Philip T., 211 N. Meramec 63105
Shanahan, Phil J., 9901 Diamond Dr. 63137
Shaner, John F., Northland Medical Bldg. 63136
Shank, Robert E., 4566 Scott Ave. 63110
Shapiro, Herbert N., Suite 102, 8631 Delmar Blvd. 63124
Shapleigh, John B., 28 Deerfield Rd. 63124
Sharp, Austin R., 901 Clayton Rd., Ballwin 63011
Shelton, Earl W., 4451 Natural Bridge 63115
Shen, Jerome T. Y., 1695 S. Brentwood Blvd. 63117
Sheridan, Edmund R., 16 Hampton Village Plaza 63109
Sherman, Laurence A., P.O. Box 14109 63178
Sherwin, Charles S., 3971 Flora Pl. 63110
Shieber, William, P.O. Box 14109 63178
Shields, J. B., 33 Flower Hill Ct. 63122
Shuman, Joseph S., Northland Medical Bldg. 63136
Shyken, Herman, 141 N. Meramec 63105
Siemers, George E., 9730 E. Watson Rd. 63126
Siesener, Herbert H., Northland Medical Bldg. 63136
Sievers, Edward F., 3001 S. Ocean Dr., Hollywood Beach, Fla. 33020
Sigmund, Charles A., 500 Northwest Plaza, St. Ann 63074
Signorelli, Andrew J., 1040 N. Mason Rd. 63141
Silvermintz, Saul D., 20 Granada Way 63124
Simbari, Bernard J., 1306 N. 58th, Milwaukee, Wis. 53208
Simmons, John L., 1035 Bellevue 63117
Simon, David L., 7809 Gannon 63130
Simon, Jerome I., 141 N. Meramec 63105
Simon, Nathan M., 7429 Buckingham Dr. 63105
Simowitz, Fredric M., 2821 N. Ballas Rd. 63131
Sims, William A., Jr., #6 Greenbriar La. 63124
Singhal, Gokul S., 4524 Tartion Dr. 63128
Singhal, Renu, 4524 Tariton 63128
Sisson, Richard G., 4511 Forest Park Blvd. 63108
Skeffington, Mary J., 18 S. Kingshighway 63108
Skimming, W. Lee, 9550 Old Bonhomme, Olivette 63132
Sletten, Ivan W., 5400 Arsenal 63139
Sly, William S., 660 S. Euclid 63110
Smiley, William, 2715 N. Union Blvd. 63113
Smith, Benjamin F., Jr., 5 Fordyce Manor 63131
Smith, Dermott, 1221 S. Grand Blvd. 63104
Smith, Emily, 510 S. Kingshighway 63110
Smith, Garland F., 621 S. New Ballas Rd. 63141
Smith, Herbert P., 5205 Chippewa 63109
Smith, Hugh R., 6651 Chippewa 63109
Smith, J. Earl, 4336 Forest de Ville Dr. 63129
Smith, John R., 1515 Lafayette Blvd. 63104
Smith, Kathleen, 1420 Grattan 63104
Smith, Kenneth R., Jr., 1325 S. Grand Blvd. 63104
Smith, Morton E., 660 S. Euclid Ave. 63110
Smith, Norris W., 3654 S. Grand Blvd. 63118
Smith, Sidney E., 2715 N. Union Blvd. 63113
Smolik, Edmund A., 621 S. New Ballas Rd. 63141
Solley, Robert T., 8 Mallard Dr., Old Saybrook, Conn. 06475
Sommer, Conrad S., 7777 Bonhomme 63105
Soorya, Narendir T., 1420 Grattan 63104
Sopuch, John A., 20 Sackston Woods 63141
Soule, Samuel D., 9115 Brentwood, Clayton 63105
Spalding, Donald G., 615 S. New Ballas Rd. 63141
Spector, Gershon J., 517 S. Euclid 63110
Spinzig, Edgar W., #5 Hawbrook La. 63122
Spitz, Richard H., 4910 Forest Park Blvd. 63108
Spoenemann, Walter H., 1515 St. Louis 63106
Squitieri, A. J., 9616 Lackland Rd. 63114
Stafford, Walter R., 141 N. Meramec 63105
Stanfield, Ned M., Jr., 8048 Blackberry Ave. 63130
Stanley, Robert J., 510 S. Kingshighway 63110
Stansbrough, Raymond A., 7520 Natural Bridge Rd. 63121
Staple, Tom W., 510 S. Kingshighway 63110
Starkloff, Gene B., 1310 S. Grand Ave. 63104
Starkloff, Max, 6304 S. Grand 63111
Steele, Jack T., 40 N. Florissant Rd. 63135
Stein, Arthur H., Jr., 4989 Barnes Hospital Plaza 63110
Steinberg, Franz U., P.O. Box 14109 63178
Steinhoff, Neil, One Stonegate, Mt. Holly, N. J. 08060
Stephen, C. Ronald, Barnes Hospital Plaza 63110
Stephens, LeRoy J., 7937 Big Bend 63119
Stergen, N. E., 1245 Graham Rd., Florissant 63031
Sterkel, Richard L., 634 N. Grand 63103
Stewart, John W., 4660 Maryland 63108
Stindel, Charles E., 341 Violet La. 63119
Stohr, Paul E., 1035 Bellevue 63117
Stokes, James M., 5505 Delmar 63112
Stolar, Jacob, 5 S. Big Bend Blvd. 63105
Stoneman, William, III, 5217 Westminster Pl. 63108
Strader, Richard P., 11656 Summerhaven Dr. 63141
Strauss, Arthur E., 6833 Waterman Blvd. 63130
Strominger, Donald B., 4989 Barnes Hosp. Plaza 63110
Stronsky, David L., 6420 Clayton Rd. 63117
Stroud, Malcolm H., Barnes Hospital Plaza 63110
Stryker, Garold V., #1 Gulf Manor Dr., Venice, Fla. 33595
Stryker, William I., 12 Oakleigh La. 63124
Stutsman, Albert C., 3720 Washington 63108
Suba, Antonio R., 141 N. Meramec 63105
Sudholt, Alfred F., Jr., 500 Northwest Plaza, St. Ann 63074
Sullivan, Clement J., 6744 Clayton Rd. 63117
Sulzbach, John F., 57 Frontenac Dr. 63131
Summers, John B., 16 Hampton Village Plaza 63109
Summers, Thomas F., 3624 S. Broadway 63118
Sunderman, Raymond C., 9811 W. Florissant 63136
Sunshine, Herbert, 707 Wayfield 63132
Susanka, William D., Suite 70G, Grasso Plaza 63123
Susman, Noah, 4511 Forest Park Blvd. 63108
Swaykus, Bernard T., 500 Northwest Plaza, St. Ann 63074
Sweet, Herbert C., #3 St. James Ct. 63119
Swope, Joseph A., 10728 Forest Path Dr. 63128
Tamialan, Luis, 400 Tanglewood Dr. 63124
Tanaka, George M., 59 Grasso Pl. 63123
Tatkow, Robert W., 4919 Forest Park Blvd. 63108

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[*] Doctor of Osteopathy.

Taussig, Barrett L., 300 S. Grand 63103
Taute, Herman, 6744 Clayton Rd. 63117
Taylor, Eugene D., 2322 N. Kingshighway 63113
Taylor, E. T., 2602 N. Union Blvd. 63113
Taylor, Helen L., 114 N. Taylor 63108
Taylor, Herbert B., 1325 S. Grand Blvd. 63104
Teitelbaum, Steven L., P.O. Box 14109 63178
Tekwani, Hiralal, 3555 Sunset Office Dr. 63127
Temporal, Jose A., 3933 S. Broadway 63118
Ternberg, Jesse L., 4960 Aubudon 63110
Tess, Allen F., 1245 Graham Rd., Florissant 63031
Tess, Melvin J. H., 1501 Switzer 63147
Thale, Thomas, 1221 S. Grand Blvd. 63104
Thiel, J. Allen, 2821 N. Ballas Rd. 63131
Thierauf, Charles G., 11745 Roundhill Dr. 63128
Thoma, George E., Jr., 3556 Caroline 63104
Thomas, Lewis J., Jr., 600 S. Kingshighway 63110
Thompson, M. Bryant, 52 Maryland Plaza 63108
Thurmann, Manfred, 911 S. Brentwood 63105
Thym, Henry P., 436 Coronado Dr., Ballwin 63011
Tichenor, Robert W., P. O. Box 8568 63126
Tillman, Mary A. T., 26 Washington Terrace 63112
Tindall, Robert N., 6651 Chippewa 63109
Tiongson, Porfirio M., 2623 Telegraph Rd. 63125
Tippett, Jack C., 6651 Chippewa 63109
Tjoflat, Oliver E., 4222 N. Grand 63107
Tonelli, George L., 6040 Westminster Pl. 63112
Tremain, Irl G., 4254 Flora Pl. 63110
Triska, Roland A., 12166 Big Bend Blvd. 63122
Trotter, Francis O., Jr., 6150 Oakland 63139
Trugly, Edith S., 12 Hacienda Dr. 63124
Tsung, Joseph C., 4911 Barnes Hospital Plaza 63110
Tucker, Eugene F., 6420 Clayton Rd. 63117
Tucker, George L., 4989 Barnes Hospital Plaza 63110
Turgeon, Ronald P., 6420 Clayton Rd. 63117
Turner, C. M., 3861 St. Louis 63107
Turner, Rush, #2 N. Euclid 63108
Twedell, Donald L., 7544 W. Florissant 63136
Uhlemeyer, Henry A., 5203 Chippewa 63109
Ulett, George A., 54 Picardy La. 63124
Umali, Emil C., 808 Pagsonm 63132
Ungvari, Joseph C., 3228 Ivanhoe 63139
Utley, James H., 12 Tuscany Pk. 63105
Vacca, Joseph B., 3915 Watson Rd. 63109
Valdes, Orestes S., Olive Blvd. at Woodsmill, Chesterfield 63017
Valtierra, Cesar A., 6376 Clayton Rd. 63117
Vandover, John T., 1615 S. Grand 63104
VanGoidsenhoven, Guy E., 1035 Bellevue 63117
VanMatre, R. M., 1436 Sheridan, N.W. Washington, D. C. 20011
VanNorman, Robert T., 6651 Chippewa 63109
Vargus, Theodoro C., P.O. Box 683, Manchester 63011
Vaughn, A. N., 4500 Olive St. 63108
Vaughan, J. Russell, 35 N. Central 63105
Vaughan, Robert W., Barnes Hospital Plaza 63110
Velasco, Ernest, 1704 S. Broadway 63104
Veluz, Benito I., 6500 Chippewa 63109
Verda, Dominic J., 4511 Olive 63108
Verde, Julian N., 9806 Meadowfern Dr. 63126
Verzola, Eufemio, 8916 Eager Rd. 63144
Viamontes, Jorge A., 1420 Grattan 63104
Vianzon, Elizabeth, 1225 Graham Rd., Florissant 63031
Vijungco, Herminia D., P.O. Box 14109 63178
Villadiego, Virgilio, 508 Arrowood Dr. 63126
Villamar, Elizabeth N., 7764 Chalmette, Hazelwood 63042
Villanueva, Angela A., 1755 S. Grand 63104
Villanueva, Cesar, 1301 Boonslick Rd., St. Charles 63301
Villarama, Antonio P., 917 Glenmill Dr., Ballwin 63011
Villarama, Lilia F., 2244 Union Rd. 63125
Viloria, Alberto B., 2425 N. Broadway 63102
Virant, John A., 119 Spoede Rd. 63124
Vitt, Alvin E., 6744 Clayton Rd. 63117
Vitt, Edwin F., 16 Hampton Village Plaza 63109
Viviano, Joseph G., 16 Hampton Village Plaza 63109
Vournas, Christopher G., 911 S. Brentwood 63105
Wachtel, Thomas L., Doctors Park, Corbin, Ky. 40701
Wacker, Leo L., 3563 Ritz Center 63125
Wade, James P., 634 N. Grand 63103
Wagner, John R., 5505 Delmar 63112
Wald, Stanley M., 4511 Forest Park Blvd. 63108
Walker, Francis S., 1035 Bellevue 63117
Walker, J. Leslie, 100 N. Euclid 63108
Wall, Lester E., 6651 Chippewa 63109
Walsh, James W., 100 N. Euclid 63108
Walter, Kenneth E., 9188 Rusticwood Trail 63126
Walters, Harold E., 3720 Washington 63108
Walters, William H., 3608 S. Grand 63118
Waltman, Stephen, 10373 Gosport Dr. 63141
Walton, Franklin E., 25 Vermont La. 63124
Warren, James C., 4911 Barnes Hospital Plaza 63110
Washington, Walter, 3737 N. Kingshighway 63115
Wasserman, Helman C., 100 N. Euclid 63108
Waters, Hugh R., 5505 Delmar 63112
Wattenberg, Carl A., 777 S. New Ballas Rd., 63141
Wayne, Sherwyn J., 135 W Adams Ave. 63122
Webb, Marion A., 4500 Olive 63108
Webb, Paul B., 3948 Wyoming 63116
Webb, Paul B., Jr., 6651 Chippewa 63109
Webb, Paul K., 721 Olive St. 63101
Webber, Wm. B., 1035 Bellevue 63117
Weber, J. R., 135 W. Adams St. 63122
Weeks, Paul M., 4960 Audubon 63110
Weiler, Thomas J., 11745 Olive St. Rd. 63141
Weir, Don C., 634 N. Grand 63103
Weir, Royal, 3720 Washington 63108
Weis, Matthew W., Route No. 1, Villa Ridge 63089
Weiss, Stuart, 4989 Barnes Hospital Plaza 63110
Weldon, Clarence S., 660 S. Euclid Ave. 63110
Welsh, Laurence C., 1930 Union Rd. 63125
Wentzel, Louis R., 2726 Chouteau 63103
Werner, William A., 6651 Chippewa 63109
Wessler, Stanford, P.O. Box 14109 63178
Westerman, Henry C., 597 Purdue 63130
Westerman, Robert N., 8157 Rockledge Trail 63123
Westura, Edwin E., 1324 S. Grand Blvd. 63104
Weyerich, Leon F., 8321 N. Broadway 63115
Weygandt, Glenn R., 10322 Oxford Hill Rd. 63141
White, William H., Jr., 1035 Bellevue 63117
Whittico, James M., 2715 N. Union Blvd. 63113
Wiegand, Herbert C., 40 Overhills Dr. 63124
Wilbois, Ronald P., 4911 Barnes Hospital Plaza 63110
Williams, Carol F., 14 Berkeley La. 63124
Williams, Jerome, 3409 N. Union 63115
Williams, Ray D., 114 N. Taylor 63108
Williamson, Walter E., 906 Olive 63101
Willman, Vallee L., 1325 S. Grand 63104
°Wilson, A. W., 2359 Chambers Rd. 63136
Wilson, Hugh M., 510 S. Kingshighway 63110
Wilson, Keith S., 52 Maryland Ave. 63108
Wilson, Susan L., 4989 Barnes Hospital Plaza 63110
Wilucki. Melvin R., 8916 Gravois 63123
Wimmer, Warren J., 3220 Parker, Florissant 63033
Windsor, Charles E., 777 S. New Ballas Rd. 63141
Winter, John H., Northland Medical Bldg. 63136
Winter, Tyrus D., 100 N. Euclid Ave. 63108
Winterer, Roland A., 10501 Trailridge Dr. 63128
Winters, Kathleen, 4511 Forest Park Blvd. 63108
Wirthlin, Edward H., 3537 Ritz Center 63125
Wise, Leslie, 660 S. Euclid Ave. 63110
Wissner, Seth, 16 Hampton Village Plaza 63109
Witt, Clyde M., 11 Deer Creek Woods 63124
Witt, Frederick W., 9216 Clayton Rd. 63124
Wittgen, Edward M., 6651 Chippewa 63109
Witzleben, Camillus L., 1465 S. Grand 63104
Wochner, R. Dean, 1515 Lafayette Ave. 63104
Wolff, Gerald, 4989 Barnes Hospital Plaza 63110
Wolfgram, Edwin D., 4500 W. Pine Blvd. 63108
Wood, Bennett R., 3442 Geraldine 63115
Woodruff, Robert A., Jr., 4940 Audubon Ave. 63110
Woods, Ralph E., 1325 S. Grand Blvd. 63104
Woolsey, Joyce E., 1465 S. Grand 63104
Woolsey, Robert M., 1325 S. Grand 63104
Word, Parker H., 3737 N. Kingshighway 63115
Wotawa, William J., 3804 Wilmington 63116
Wray, R. C., Jr., 4960 Audubon 63110
Wurr, Dieter, P. O. Box 99, Arnold 63010
Yang, Jae H., 3541 Ritz Center 63125
Yannakakis, John E., 1245 Graham Rd., Florissant 63031
Ylagan, Amando, Jr., 6376 Clayton Rd. 63117
Yore, Richard W., 5505 Delmar 63112
Younge, Walter A., 501 Madison, Lovejoy, Ill. 62059
Younger, Anita, 3624 Russell Blvd. 63110
Younger, Ernest, 3624 Russell Blvd. 63110
Zahorsky, Theodore S., 15 Arundel Place 63105
Zeffren, Joel L., 2428 Woodson Rd. 63114
Zekert, Horst, 3654 S. Grand 63118
Ziegelmeyer, John S., 40 N. Kingshighway 63108
Zingale, Frank G., 6500 Chippewa 63109
Zink, Oscar C., #9 The Orchards 63132
Zivnuska, Fred R., 510 S. Kingshighway 63110
Zografakis, George H., 100 N. Euclid Ave., 63108
Zuckner, Jack, 522 N. New Ballas Rd. 63141
Zukowski, Edward T., 88 River Bend Dr., Chesterfield 63017
Zwart, Claude H., 634 N. Grand 63103

ST. LOUIS COUNTY MEDICAL SOCIETY
(St. Louis)

Albera, Victor H., 2066 Rurline 63141
Alex, Morris, 522 N. New Ballas Rd. 63141
Alexander, George K., 766 Penny Ct., Ballwin 63011
Allen, James H., 12 Long Meadows 63131
Althaus, Carl J., 15225 Isle View Dr., Ballwin 63011
Altheide, Harvey E., #9 Magnolia Dr. 63124
Alvarez, Ulises C., 5400 Arsenal 63139
Anslinger, David I., 5505 Delmar 63112
Aronson, Abraham, 150 No. Meramec Ave., Clayton 63105
Ayata, Sedat M., #2 Bon Aire Dr. 63132
Ayvazian, Vatche H., 11567 Tivoli La. 63141
Bagby, James W., 141 N. Meramec 63105
Bagwe, Lata L., 1056 Willowbrook Dr. 63141
Bailey, William H., 9157 Milton Ave., 63114
Balster, Vernon H., 819 Locust 63101
Bamshad, Jerry, 7224 Hazelcrest Dr., Hazelwood 63042
Banjastikul, Chusak, 2821 N. Ballas Rd. 63131
Barbo-Mencias. Cristeta, 3015 N. Ballas Rd. 63131
Barker, Edward T., 2821 N. Ballas Rd. 63131
Barragan, Hector, 901 Clayton Rd., Ballwin 63011
Barrow, Jack, 35 N. Central 63105
Bauer, Joseph A., #5 Ridgewood Rd. 63124
Bauer, Robert A., Northland Medical Bldg. 63136
Beasley, L. Kenneth, 16 Hampton Village Plaza 63109
Benage, Clarence M., 1125 Graham Rd. Florissant 63031
Berger, Edward J., 300 S. Grand 63103
Bergmann, John F., 550 Bonhomme Woods Rd. 63132
Bergmann, Martin, 8515 Delmar 63124

° Doctor of Osteopathy.

Bernabe, Florinio H., 513 Glan Toi, Manchester 63011
Bernabe, Ofelia M., 513 Glan Toi, Manchester 63011
Berndsen, Gerard H., 9313 Manchester 63119
Bernstein, Aaron M., 60 Broadview Dr., Clayton 63105
Berwaid, Irwin I., 747 Old Bonhomme Rd. 63132
Birenbaum, Aaron, 10511 Old Olive St. Rd. 63141
Bishop, Marion D., 751 St. Francois St., Florissant 63031
Blackman, Nathan, 300 Althus Pl. 63122
Boles, C. Read, 35 N. Central 63105
Bolinske, Robert E., 6744 Clayton Rd. 63117
Boonshaft, Benje, 10511 Old Olive St. Rd. 63141
Bortnick, Arthur R., 8631 Delmar 63124
Bowles, G. Robert, 135 W. Adams Ave. 63122
Brand, Earl L., 120 E. Lockwood 63119
Braufman, Harvey S., 111 Church Rd. 63135
Brennan, Patricia A., 111 Church Rd. 63135
Brion, Pacelli E., 6500 Chippewa 63109
Briscoe, John R., 2648 Oakview Terr. 63143
Brother, George M., P.O. Box 3242, St. Petersburg. Fla. 33731
Burnside, Charles R., 206 W. Argonne Dr. 63122
Burstein, Robert, 911 S. Brentwood 63105
Butsch, Richard, 12025 Manchester Rd. 63131
Cabral, Galileu, 3015 N. Ballas Rd. 63131
Cacioppo, Joseph E., 1040 N. Mason Rd. 63141
Callahan, Donald E., Northland Medical Bldg. 63136
Carlson, Arne E., 8707 St. Charles Rock Rd. 63114
Carmona, Gilberto V., P.O. Box 91, Arnold 63010
Carrera, Mario, 9408 W. Milton 63114
Carrier, John A., 216 Parkland 63122
Carroll, Percy J., 40 Briar Cliff La. 63124
Carter, Edwin E., 777 S. New Ballas Rd., Creve Coeur 63141
Casas, Julian R., 6219 Berthold 63139
Castro, Juan M., 4 Williamsburg Rd. 63141
Catanzaro, Rudolph E., 412 Tregaron Pl. 63131
Chakrobortty, Hirenda, 3654 S. Grand 63118
Chinsky, Murray, 6223 Natural Bridge Rd. 63120
Choudhuri, Ajit Kumar, 1420 Grattan 63104
Chung, Kap Eun, 3015 N. Ballas Rd. 63131
Coates, Thomas A., 1200 S. Big Bend 63117
Codilla, Sostenes G., 1755 S. Grand Blvd. 63104
Cohen, Frank, 10822 St. Charles Rock Rd. 63114
Cohen, Robert S., 2821 Ballas Rd. 63131
Cokrhame, Jack, 12922 Dunstone, Florissant 63033
Collins, John M., 6432 Hampton 63109
Compton, James R., 5632 America Dr., Sarasota, Fla. 33581
Cone, Alfred J., Box 392, Rt. 2, Chesterfield 63017
Conley, William R., 2736 Georgetown, Ann Arbor, Mich. 48105
Costrino, Joseph A., 2425 N. Broadway 63102
Cowdry, Edmund V., Jr., 777 S. New Ballas Rd. 63141
Cox, Robert D., 1597 Knollway Dr. 63135
Cozart, Duane E., 181 Gunston Hall Ct., Chesterfield 63017
Crawford, Katherine J., 7115 Washington 63130
Crespo, Horacio T., 370 Raymond Dr., Florissant 63031
Crespo, Remedios R., 370 Raymond Dr., Florissant 63031
Cuento, Oblendo A., 2821 N. Ballas 63131
Cullum, Albert G. J., 920 Dorchester, Middlesboro, Ky. 40965
Cunningham, E. J., Jr., 38 Auburndale 63141
Cutler, Harry, 4511 Forest Park Blvd. 63108
Daughaday, William H., 4949 Barnes Hospital Plaza 63110
Davidson, Morris, 35 N. Central 63105
Davis, Edgar W., 777 S. New Bailas Rd. 63141
Dean, Lee W., Jr., 9067 Clayton Rd. 63117
Deitchman, Robert B., 141 N. Meramec 63105
DeLeon, Romualdo V., 525 Jeffco Blvd., Arnold 63010
Del Rosario, Horacio O., 1984 Pickfair Dr. 63141
Dennison, Carl F., 777 S. New Ballas Rd. 63141
Deutch, Max, 29 Willow Hill Rd. 63124
Deyton, John W., 1617 S. Brentwood Blvd. 63105
Dickler, Donald J., P.O. Box 14109 63178
Diehr, Maurice A., 9385 Page Blvd. 63114
Dierker, LeRoy, 12580 Markaire Dr. 63141
Diestelhorst, James A., 12059 Ameling Rd., Hazelwood 63042
Doisy, Robert A., 103 Edwin 63122
Donley, Leo F., Jr., 2425 N. Broadway 63106
Drum, Helen M., 1412 Spoede Rd. 63131
Duggan, John J., Jr., 333 S. Kirkwood Rd. 63122
Dulick, Michael, 9012 Manchester 63117
Dumadag, Virgilio P., 2280 Whitby Rd., Chesterfield 63017
Durr, Jon W., 1809 Doris Dr., Columbia 65201
Ebel, Eugene H., 11115 New Halls Ferry, Florissant 63033
Eber, Carl T., 610 Locust St. 63101
Ecker, Decider B., Pacific 63069
Eggleston, Thomas F., 11745 Olive St. Rd. 63141
Ehrlich, Carl F., Jr., 502 Kenilworth, Ballwin 63011
Eidelman, Jack R., 4511 Forest Park Blvd. 63108
Eller, C. Howe, 801 S. Brentwood Blvd. 63105
Ellison, Leroy E., 407 Turner, Warren, Ark. 71671
Elson, Julius, #5 Granada Way 63124
Emerson, Reynolds L., 1695 Brentwood Blvd. 63144
Ernst, Joseph G., 325 N. Kirkwood Rd. 63122
Escobedo, Bolivar, 1035 Bellevue 63117
Estes, Jack M., 7521 W. Florissant Ave. 63136
Eversoll, Norton J., 1455 Tyler, Hollywood, Fla. 33020
Exarhou, Klark, 1245 Graham Rd. 63031
Fabito, Daniel C., 1018 Parkwatch Dr., Manchester 63011
Fabito, Melinda A., 1621 Kenilworth 63144
Falk, O. P. J., #3 Southmoor Dr. 63105
Feldman, David, 8631 Delmar 63124
Ferrara, John P., 15637 Heathercraft Ct., Chesterfield 63017
Fingerhood, Marvin G., 9811 W. Florissant Ave. 63136
Fingert, Hyman H., 4542 Maryland 63108
Finkel, Barney W., 6508 W. Florissant 63136
Finley, Freeman L., 2475 Hartland 63114
Fischer, John R., 950 Francis Pl. 63105
Fish, Richard G., 4370 Forest de Ville Dr. 63129
Fishman, John J., 3015 Ballas Rd. 63131
Fletes, James W., 7270 Natural Bridge Rd. 63121
Floro, Mariano N., Jr., 11115 New Halls Ferry Rd., Florissant 63033
Flynn, Thomas T., 1617 S. Brentwood Blvd. 63144
Forsman, Waldo W., Jr., 4128 S. Lindbergh Blvd. 63126
Forsyth, B. Todd, 100 N. Euclid 63108
Fox, Leon J., 4511 Forest Park Blvd. 63108
Franklin, Harold A., 606 S. Meramec 63105
Freiheit, Harold J., 9270 Rott Rd. 63127
Friedman, Ira J., 2428 Woodson Rd. 63114
Friedman, Robert H., 2821 N. Ballas Rd. 63131
Froelich, Edwin J., 747 Dilworth Rd., Rt. #2, Lebanon 65536
Fuchs, George J., Route 2, Barnett 65011
Gaines, Quentin M., 136 W. Mermod 63122
Gale, Arthur H., 2428 Woodson Rd. 63114
Gale, Philip R., 9216 Clayton Rd. 63124
Gall, Ira, 777 S. New Ballas Rd. 63141
Gaunt, Frank P., 203 W. Cedar 63119
Gay, Elizabeth K., 5166 Chiltenham Rd. Florissant 63033
Gearhart, Wilbur H., 2821 N. Ballas Rd. 63131
Gellman, Elliott F., 621 S. New Ballas Rd. 63141
Gibstine, Marvin H., 500 Northwest Plaza, St. Ann 63074
Giem, Ross, 2211 E. Washington, Pasadena, Calif. 91104
Gieselman, Ralph V., 4910 Forest Park Blvd. 63108
Giraparnont, Prabhak, 601 S. Brentwood Blvd. 63105
Gniwesch, Jack Maurice, 8679 Spoon Dr. 63132
Goldman, Hyman J., 4511 Forest Park Blvd. 63108
Gollub, Samuel W., 8112 Delmar 63130
Goodman, J. N., Rt. #3, Hardy, Ark. 72542
Goodman, Nathaniel, 7521 W. Florissant Ave. 63136
Goodrich, Harold A., 19 E. Lockwood 63119
Grabau, Gene H., 8036 N. Broadway 63115
Gray, Walter C., 8715 St. Charles Rock Rd. 63114
Green, Manuel E., 1625 Tower Grove 63110
Greenman, Marshall B., 777 S. New Ballas Rd 63141
Gronau, Axel R., 7062 Waterman 63130
Grundmann, William H., 634 N. Grand 63103
Hagemann, Paul O., 141 N. Meramec, Clayton 63105
Hagen, Duane, 621 S. New Ballas Rd. 63141
Hall, Eugene W., 116 S. Florissant Rd. 63135
Hallazgo, Santiago Y., 14540 Coeur D'Alene, Chesterfield 63017
Hallinger, Earl S. Jr., 2209 Kipp Ct. 63136
Hampton, Oscar P., Jr., 3720 Washington Blvd. 63108
Hantman, Stephen L., 14305 Bramblewood Ct., Chesterfield 63017
Hantz, Oscar, 1125 Graham Rd., Florissant 63031
Hardin, Wm. B. Jr., 660 S. Euclid 63110
Hardy, Guerdan, 35 N. Central 63105
Hardy, Patrick J., 1125 Graham Rd., Florissant 63031
Harris, Charles W., 133 Pompano Beach, Pompano Beach, Fla. 33062
Harwell, J. Larry, 6914 Kingsbury Blvd. 63130
Hasenmueller, James J., 6651 Chippewa 63109
Hawkins, Lee W., #1 Clarkson Rd., Chesterfield 63017
Heideman, Milo L., 7708 Weston Pl. 63117
Heiman, Avivi, 16 Storyview 63141
Helbing, Edward J., 1717 Grande S.E., Rio Rancho Estates, New Mexico 87124
Hendin, Aaron, 9636 Old Bonhomme Rd. 63132
Hershey, Falls B., 621 S. New Ballas Rd. 63141
Herzog, Godofredo M., 1125 Graham Rd., Florissant 63031
Hickey, Glenn M., 701 Manchester Rd., Manchester 63011
Ho, Kun-Tzeng, 1125 Graham Rd., Florissant 63031
Hobbs, John E., 3720 Washington 63108
Hogancamp, Glenn E., 53 Clarkson Rd., Ellisville 63011
Holscher, Edward C., 35 N. Central 63105
Holtz Sumner, 777 S. New Ballas Rd. 63141
Hookerman, Bruce J., 1207 Oxford Hill Court 63141
Howe, Albert L., 31 York Dr. 63144
Howe, Louis F., 1136 Ridgelynn 63124
Huck, Frank F., Drawer H, Fenton 63026
Hudgens, Richard W., 708 Radcliffe 63130
Hughes, Robert G., 11745 Olive St. Rd. 63141
Irick, Carl C., 74 Myrtle Rd, Naples, Fla. 33940
Islam, Mohammed N., Apt. 330, 6625 Clayton Ave. 63139
Izmirlian, Grant, 1040 Mason 63141
Jacobs, Frederick A., 119 Church St. 63135
Jick, Sidney, 4910 Forest Park 63108
Johnson, Roy, 40 N. Florissant Rd. 63135
Jones, Dorothy J., #6 Glen Creek La. 63124
Jones, Victor, 2334 St. Clair Ave., Brentwood 63144
Jotte, Richard F., 10300 St. Charles Rock Rd. 63114
Kabir, Mohammed A., 9293 Watson Rd. 63126
Kahn, Lawrence, 4566 Scott Ave. 63110
Kamuran, Ozgoncu, 777 S. New Ballas Rd. 63141
Karatela, Mohammed, 1420 Grattan 63104
Kardesch, Milton, 8 Spoede Woods 63141
Karsh, Robert S., 533 Purdue 63130
Kendis, Joseph B., 777 S. New Balles Rd. at Highway 40 63141
Kenney, John D., 2821 N. Ballas Rd. 63131

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* Doctor of Osteopathy.

Kenzler, Jack I., 819 Locust 63101
Kessler, Sheldon, 1125 Graham Rd., Florissant 63031
Khan, Abdul G., #5 Coach n Four 63131
Khan, Altaf Ali, 10518-A Kay Berrie Dr. 63123
Khan, Chung H., 777 S. New Ballas Rd. 63141
Kilker, Clarence H., 7520 Natural Bridge Rd. 63121
Kilker, Donald E., 7520 Natural Bridge Rd. 63121
Kimelman, Nathan, 1005 Big Bend Blvd. 63117
Kimura, Richard Y., 6651 Chippewa 63109
King, Eustace E., III, 111 Church St. 63135
Kingsland, Robert C., 10 Brookwood Rd. 63131
Kipnis, David M., 7200 Wydown Blvd. 63105
Klippel, Allen P., 1625 S. 14th 63104
Knock, Henry L., 135 W. Adams 63122
Koch, Robert E., 35 N. Central 63105
Koerner, Kenneth A., 12940 Topping Estates Dr. 63131
Koessel, Arthur W., 640 Lockwood Ct. 63119
Konzelmann, John A., 7401 Teasdale Dr. 63130
Kopp, Jules H., 1040 Mason Rd., North 63141
Korenblat, Phillip E., 11249 Tureen Dr. 63141
Kuttner, Marianne, 8515 Delmar Blvd., 63124
Kwan, Vincente W., 104 Boyer, Potosi 63664
Laird, John M., Jr., 1125 Graham Rd. 63031
Lansche, W. Edward, 5505 Delmar 63112
Lauber, Joseph J., 39 Villa Coublay 63131
Leonhardt, Erwin M., 9015 Rock Forest Dr. 63123
Leslie, Charles H., 209 S. Kirkwood Rd. 63122
Levey, Simon A., 4400 Lindell 63108
Levin, Marvin E., 777 S. New Ballas Rd. 63141
Lewin, Wilbur H., 906 Olive 63101
Lins, Robert D., 13253 Bon Royale, Des Peres 63131
Lipschitz, Ervin, 777 S. New Ballas Rd. 63141
Liss, Jay Lawrence, 911 S. Brentwood Blvd. 63105
Lissner, Arthur B., 13 Royale Ct., Lake St. Louis, O'Fallon 63366
Livingston, Don G., 650 Manchester, Ballwin 63011
Lohr, Robert W., 236 Conway Hill Rd. 63141
Lord, Richard E., 135 W. Adams St. 63122
Lowther, Gerald S., 2259 Whitley Rd., Chesterfield 63017
Luehrs, Robert O., 230 S. Bemiston 63105
Lund, Herluf G., 3654 S. Grand 63118
Lund, Robert H., 35 N. Central 63105
Luther, George A., 135 West Adams 63122
Lyss, Carl, 100 N. Euclid 63108
Lyss, Stanley B., 8112 Delmar, University City 63130
McCall, Edwin L., 22 Hilltop Dr., Kimberling City 65737
McCarthy, Thomas D., 607 East Dr. 63135
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McGinnis, William F., 5505 Delmar 63112
McKee, Oliver A., N. Kirkwood Rd. & Washington 63122
McLean, Royal C., 520 W. Jewel 63122
McMurray, Herbert C., 201 Manchester Rd., Manchester 63011
McNalley, Frank P., 8019 Watkins Dr. 63105
McNalley, Michael, 135 W. Adams 63122
Magee, William E., 4910 Forest Park Blvd. 63108
Magness, Guy N., 608 Kingsland 63130
Mahe, George A., 8039 Park Dr. 63117
Mangelsdorf, Thomas K., 149 N. Meramec, Clayton 63105
Maravilla, Levy M., 4211 Bayless 63123
Marcus, Morris D., 8631 Delmar 63124
Margolis, Richard M., 50 Ladue Estates, East 63141
Marmor, William A., 8600 Delmar Blvd. 63124
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Martz, John C., 6 Denny Lane 63131
Mattis, Robert D., 21 Brentmoor Pk. 63105
Maxwell, Richard W., 5257 Lindell Blvd. 63108
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Meador, James R., 9 Bellerive Acres 63121
Meadows, C. Douglas, 777 S. New Ballas Rd. 63141
Medler, John F., 2821 N. Ballas Rd. 63131
Medler, P. Louis, 11115 New Hall's Ferry, Florissant 63033
Medrano, Cresenciano A., 56 Lincord Dr. 63128
Medrano, Lina E., 56 Lincord Dr. 63128
Mencias, Cristeta B., 11523 Patty Ann Dr. 63141
Mendelson, David F., 141 N. Meramec 63105
Meneses, Orlando G., 1857 Bopp Rd. 63131
Merrims, Theodore, 1241 Warson Pines 63132
Merritt, Burch A., 7309 Natural Bridge Rd. 63121
Merz, Jean J., 12634 Olive St. Rd., Creve Coeur 63141
Meyer, James E., 201 Manchester, Manchester 63011
Meyer, Jay, 911 S. Brentwood, Clayton 63105
Mezera, Raymond A., 7345 Whitehaven 63123
Middleton, Jerry N., 24 Foxboro Rd. 63124
Milder, Benjamin, 211 N. Meramec 63105
Miles, Paul W., 2821 N. Ballas Rd. at Clayton Rd. 63131
Millangue, Consolacion P., 9422 Plainfield Dr., Rock Hill 63119
Millangue, Rafael M., 9422 Plainfield Dr., Rock Hill 63119
Miller, Charles, Jr., 206 N. Filmore 63122
Miller, Geoffrey W., 4511 Forest Park Blvd. 63108
Minnihan, Robert W., 14535 Marmont Dr., Chesterfield 63017
Molden, Charles A., 7520 Natural Bridge Rd. 63121
Monat, Seymour, 8631 Delmar 63124
Montes, Arturo C., 1453 McLaran 63147
Montes-de-Oca, Julio, 22 Clayton Terr. 63131
Moon, Thomas R., Jr., 35 N. Central 63105
Moore. Harry G., 917 S. 18th St. 63103
Moore, Harry G., Jr., 141 N. Meramec 63105
Moore, Walter L., 6376 Clayton Rd. 63117
Mowrer, Marie O., 5400 Arsenal 63139
Mueller, Robert J., 16 Hampton Village Plaza 63109
Mullarky, Wilbur A., 14176 Parliament Dr., Chesterfield 63017
Murphy. John C., 3720 Washington 63108
Myers, Ivan, 232 Chasselle Lane 63141
Nakada, James R., 950 Francis Pl. 63105
Nelson, J. Roger, 135 W. Adams 63122
Newport, Gerald, 64 Ladue Estates 63141
Noller, Henry W., 9440 Midland 63114
Nouhan, Joseph G., 100 Ladue Meadows La. 63141
Nuetzel, John A., 911 S. Brentwood Blvd. 63105
Nukrongsin, Somporn, P.O. Box 14109 63178
Nunez, Maria M., 2821 Ballas Rd. 63131
Nussbaum, Robert A., 3555 Sunset Office Dr. 63127
O'Bannon, L. W., Jr., 11895 North Ranch, Florissant 63033
O'Connor, Robert J., 751 St. Francois St., Florissant 63031
Oglesby, Richard B., 621 S. New Ballas Rd. 63141
Ohlms, David L., 777 S. New Ballas Rd. at Highway 40 63141
O'Keefe, Joseph D., 135 W. Adams 63122
O'Neal, Patricia, 4989 Barnes Hosp. Plaza 63110
Ortillo, Amado P., 1615 Hobnail Ct. 63141
Ott, Harold J., 2816 Sutton 63143
Ottensmeyer, Charles D., 677 N. New Ballas Rd. 63141
Ottolini, James L., 11745 Olive Blvd. 63141
Paris, William H., 7520 Natural Bridge Rd. 63121
Park, Agatha Lee, 111 Church 63135
Parker, Brent M., 2607 Luan Court, Columbia 65201
Pawol, S. E., 9408 W. Milton 63114
Peebles, J. B., Jr., 135 W. Adams 63122
Pennoyer, James, 117 Plant Ave., Webster Groves 63119
Perry, William D., 100 N. Euclid 63108
Peterson, Frederick D., 8025 Dale Ave. 63117
Philip, Varkey, 535 Couch 63122
Phillips, Hanford, 6825 Clayton Ave. 63139
Phipatanakul, Supote, 7464 Ahern Ct. 63130
Pimentel, Esperanza, 11161 Linnell Dr. 63136
Pipes, Keith E., 829 Renderer 63122
Platt, William R., 57 Ridgemoor Dr. 63105
Podos, Steven M., 18 Foxboro 63124
Powell, Charles B., 1125 Graham Rd., Florissant 63031
Price, Robert L., 56 High Valley Dr., Chesterfield 63017
Prieto-Basa, Nenita, 2601 Whittier 63113
Probst, Raymond E., 10345 Watson Rd. 63127
Rabin, Erwin R., No. 5 Loren Woods 63124
Racadio, Severo M., 223 Orrick 63122
Rachlin, Maxwell, 211 N. Meramec 63105
Ragland, John E., 624 Kehrs Mill Rd., Ballwin 63011
Rao, Carlo, 18 Ladue Estates 63141
Redington, James C., Jr., #1 Tuscany Pk. 63105
Reese, A. Victor, 120 E. Lockwood 63119
Reiches, Aaron J., 150 N. Meramec 63105
Reinhard, Edward H., 235 Sylvester 63119
Reitman, Stanley, #8 Heartwoods Ct. 63132
Rendleman, David D., 751 Cella Rd. 63124
Rennard, Marvin, 2821 N. Ballas 63131
Repaso, Florante A., 433 W. Springfield, Sullivan 63080
Repp, Theodore J., 9311 Duenke Dr. 63137
Reynolds, James A., 1669 Beaucoire Dr., Warson Woods 63122
Richardson, Thomas F., 8034 Crescent 63105
Richmond, Michael R., 1125 Graham Rd., Florissant 63031
Riggio, Salvatore N., 9901 Gravois Rd. 63123
Roberts, Harold K., 35 N. Central 63105
Roberts, John P., 3015 Barrett Station Rd. 63122
Roberts, John R., 8649 Rosalie 63144
Robertson, Frank G., 2821 N. Ballas Rd. 63131
Robinson, Edith C., #2 Briar Oak 63132
Roblee, Melvin A., 35 N. Central 63105
Roddy, Hugh John, 601 S. Brentwood 63105
Rogers, Hunter Bryan, 300 Sylvester 63119
Rogers, John A., 8124 Roxburgh, Clayton 63105
Rohlfing, Edwin H., 315 N. Forsyth 63105
Roos, Albert, 1040 Sylvan Pl. 63122
Rosenthal, Randall, 703 S. Central, Clayton 63105
Roufa, Joseph F., 4511 Forest Park Blvd. 63108
Rouse, Ernest T., 100 N. Euclid 63108
Rubenstein, Melvin, 4511 Forest Park 63108
Rubin, Robert, 10 Adams Ave. 63135
Ruhling, Rudy, 5203 Chippewa 63109
Ryan, John J., 28 Ridgetop 63117
Saha, Sudha R., 620 Packford, Ballwin 63011
Santillano, Antonio B., 2821 N. Ballas Rd. 63131
Schaef, Mary L., 7450 Stanford 63130
Schaerer, Jacques P., 777 S. New Ballas Rd. 63141
Schechter, Samuel E., 8000 Bonhomme Rd. 63105
Scheele, Paul M., 135 W. Adams 63122
Schlansky, Seymour M., 7247 Delmar 63130
Schluer, Elmer P., 9 Long Meadows 63131
Schmidt, Edmund M., 6704 W. Florissant 63136
Schneider, Sam, 4511 Forest Park Blvd. 63108
Schoentag, John S., 1869 Walnutway Dr. 63141
Schopp, Alvin C., 634 N. Grand 63103
Schultz, E. Robert, 9840 Copper Hill Rd. 63124
Schultz, Samuel, 2730 Watson Rd. 63109
Schwartz, Melvin M., 2821 Ballas Rd. 63131
Schwartzman, Bernard, 4511 Forest Park 63108
Schwarz, Luis, 8145 University Dr. 63105
Seabaugh, Ottis D., 105 W. Lockwood 63119
Shaikun, Gerald L., 14025 Crosstrails Dr., Chesterfield 63017
Shatz, Burton A., 4910 Forest Park 63108
Sheffield, William, 28 Orchard Ave. 63119
Sherman, Warren G., 309 Manchester Rd., Manchester 63011
Shoebe, Frank O., 100 N. Euclid Ave., Suite 310 63108
Silver, Bernd, 530 Warren 63130
Silverberg, Charles, 45 Rio Vista Dr. 63124
Simril, Wayne A., 100 N. Euclid Ave. 63108
Sisk, James C., 141 N. Meramec Ave. 63105
Skilling, David M., Jr., 5505 Delmar 63112
Skinner, John S., 31 Willow Hill Rd. 63124
Smit, Herbert M., 3720 Washington 63108

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* Doctor of Osteopatby.

Solomon, Felix G., 1424 Bob O Link Pl. 63144
Sommer, Ross B., 100 N. Euclid 63108
Soto, Alberto A., 2821 N. Ballas Rd. 63131
Spector, Gene W., 4511 Forest Park Blvd. 63108
Speer, David L., 1043 Port Diane, Box 12643. 63141
Speno, Angelo A., 11815 Point Oak Dr. 63131
Spitz, Milton A., 505 N. Lake Shore Dr., Chicago, Ill. 60611
Spoeneman, Marlin C., 7205 W. Florissant 63136
Staehle. Melvin E., 7325 Ravina Dr., 63121
Stein, Harry J., 6917 W. Florissant 63136
Stein, Leonard P., 2618 Oregon 63118
Steiner, Alexander J., 141 N. Meramec Ave., Clayton 63105
Stephens, William A., Box 250, Chesterfield 63017
Sterling, John A., 1230 Kenmore Dr. 63122
Stevens, Robert W., 9311 Duenke Dr. 63137
Stewart, Frances H., 7161 Delmar 63130
Stickle. A. W., 135 W. Adams 63122
Strauchen, Gilbert W., Box 258, Rt. 1, N. Key Largo, Fla. 33037
Stuart. Wallace, White Horse Farm, Eureka 63025
Stuebner, Roland W., 1930 Indian Hill, Marco Island, Fla. 33937
Sullivan, Wm. Wallace, 1303 Lockett, Kirkwood 63122
Susman, Irvin C., 216 S. Kingshighway 63110
Sutter, Richard A., 819 Locust St. 63101
Talaban, Raymundo D., 607 W. Main St., Fredericktown 63645
Tashma, Sigmund, 904 Dalkeith 63132
Teiber, Frederick W., 38 Fair Oaks 63124
Thiele, Belmont R., 10201 Thornwood Dr. 63124
Tobias, Norman, 634 N. Grand 63103
Tomlinson, William L., 1851 Candlewick Dr. 63131
•Toon, Thomas J., 10093 W. Florissant 63136
Torin, Bernice A., 951 Old Bonhomme Rd. 63132
Treiman, Robert C., #7 Radnor Rd. 63131
Tremain, E. E., 2901 Big Bend 63117
Trueblood, Alva C., Jr., 325 N. Kirkwood Rd., 63122
Trunko, Leo, 1900 Telegraph Rd. 63125
Tsifutis. Argyrios, 500 Northwest Plaza, St. Ann 63074
Turner, James K., 35 N. Central Ave. 63105
Ulett, Pearl C., 54 Picardy La. 63124
Valach, Frank J., 2821 N. Ballas Rd. 63131
Vatterott, Paul B., 10300 St. Charles Rock Rd. 63114
Ventus. Manuel A., 233 S. Greentrail, Chesterfield 63017
Viers, Wayne A., 135 W. Adams 63122
Vilar, Pio M., Jr., 12083 Gist Park Dr., Bridgeton 63044
Viraghaty, Julius Gyula, 58 Old State Rd., Glencoe 63038
Vitale, Anthony J., 7150 Natural Bridge Rd. 63121
Vitale, Nicholas S., 7150 Natural Bridge Rd. 63121
Vollmar, Clarence J., 8787 Big Bend 63119
Votaw, Robert E., 10 Warson Terr. 63124
Walker, Harvey, Jr., 35 N. Central 63105
Walker, Willard B., 35 N. Central 63105
Wallwork, J. Caleb, 178 Auld Spanish Ct., Ballwin 63011
Walter, William L., 135 W. Adams 63122
Walters, Henry W., 35 N. Central 63105
Walther, Roy A., Jr., #7 High Acres 63132
Ward, Robert L., 9811 W. Florissant 63116
Waxelman, Roger J., 309 Manchester Rd., Manchester 63011
Weber, Sol, 1755 S. Grand Ave. 63104
Wee, George C., 1003 Manchester, Ellisville 63011
Weinhaus, Robert S., 150 N. Meramec 63105
Weisman, Renate D., 500 Northwest Plaza, St. Ann 63074
Weisman, Sol, 500 Northwest Plaza 63074
Welner, Amos, 4940 Audubon 63105
Wenneker, Alvin S., 8112 Delmar 63130
West, Joseph W., 135 W. Adams 63122
Westrup, Ellsworth A., 8540 Big Bend 63119
Weyerich, Noel F., 270 Glen Valley Dr., Chesterfield 63017
White, Newton B., 12758 Honeygrove Ct. 63141
Whitener, Miles C., 580 Dielman 63132
Whitener, Paul R., 3291 Carlow Place, St. Ann 63074
Wiedershine, Leonard J., 8420 Delmar 63124
Wissmath, Frank S., 35 N. Central Ave. 63105
Wittler, Harry A., 325 N. Kirkwood 63122
Wolf, David I., 12612 Markaire Dr. 63141
Wolfe, Edward, 9 Clermont 63124
Wolff, Dolores P., #3 Tuscany Park 63105
Wolff, Harold D., 8420 Delmar 63124
Wolff, Ray J., 500 Northwest Plaza, St. Ann 63074
Womack, Granville J., 2313 Charlemagne, Maryland Heights 63043
Wood, James A., 141 N. Meramec 63105
Woodruff, Sharon L., 205 Elm, Washington 63090
Wool, Gerald, 731 Oakbrook Lane 63132
Wulff, George J. L., Jr., 4911 Barnes Hospital Plaza 63110
Wyatt, Lois C., 103 N. Taylor 63122
Yalcin, Enver, 4903 Kerth Rd. 63128
Yanow, Mitchell, 777 S. New Ballas Rd. 63141
Yap, Mardonio J. R., 7521 W. Florissant Ave. 63136
Yazdi, A. M., 16 Hampton Village Plaza 63109
Zeigler, Joseph M., 6 Beacon Hill, Creve Coeur 63141
Zimmerman, Herbert B., Room 808, 100 N. Euclid 63108
Zwirn, Benjamin H., Northland Medical Bldg. 63136

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Pinkstaff, Thomas H., 1012 N. Main, Sikeston
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Sargent, Alden P., Sikeston
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Walker, Ambrose T., Mammoth Springs, Ark. 72554
Wall, Joe A., Houston 65483
Wiles, Jack N., West Plains 65775

STODDARD COUNTY

(SEMO County Medical Society)

STONE COUNTY

(Ozarks Medical Society)

SULLIVAN COUNTY

(North Central Counties Medical Society)

TANEY COUNTY

(Ozarks Medical Society)

TEXAS COUNTY

(South Central Counties Medical Society)

VERNON COUNTY

(West Central Missouri Medical Society)

WARREN COUNTY

(Franklin-Gasconade-Warren County Medical Society)

WASHINGTON COUNTY

(Mineral Area County Medical Society)

WAYNE COUNTY

(Butler-Wayne-Ripley County Medical Society)

WEBSTER COUNTY MEDICAL SOCIETY

Bareis, Robert J., Marshfield 65706
Macdonnell, Thomas M., Marshfield 65706

WEST CENTRAL MISSOURI MEDICAL SOCIETY

(Bates-Cass-Cedar-St. Clair-Vernon Counties)

Allen, Claude J., Rich Hill 64779
Allen, William H., Nevada 64772
Barone, Paul L., Nevada 64772
Brownsberger, Robert H., Appleton City 64724
Davis, C. Braxton, Nevada 64772
Eklund, Alfred W., Pleasant Hill 64080
Ellett, William H., Appleton City 64724
Frein, Donald E., Harrisonville 64701
Giesler, Donald H., Osceola 64776
Greenlund, Nelson, Nevada 64772
Hansen, Arthur L., Butler 64730
Harms, James F., Nevada 64772
Haynie, William W., Butler 64730
Henry, Robert D., Harrisonville 64701
Hughes, Derek Dominic, Nevada State Hospital, Nevada 64772
Jones, Edward S., Southland Shopping Center, Harrisonville 64701
King, Elbert R., Route 4, Boise, Idaho 83702
Langeluttig, Harry V., Jr., 204 Broadway, El Dorado Springs 64744
Long, Curtis W., Butler 64730
Long, David S., 202 S. Lexington, Harrisonville 64701
Lusk, Charles A., Jr., Butler 64730
McCann, Louis P., Nevada 64772
Magee, Robert L., El Dorado Springs 64744
Magruder, L. M., Nevada 64772
Martin, Forrest L., Nevada 64772
Mou, Bin, Nevada State Hospital, Nevada 64772
Pascoe, James J., Nevada 64772
Pearse, Roy W., Jr., Nevada 64772
Pickens, E. Allen, 4370 Chateau de Ville Dr., St. Louis 63129
Reed, G. H., Appleton City 64724
Rinck, Edward C., Nevada 64772
Seevers, Ruth, Osceola 64776
Strobach, Robert L., Butler 64730
Thies, Jerome H., Osceola 64776
Torontow, John, Nevada 64772
Wheeler, Robert L., Harrisonville 64701
Wray, Rolla B., Nevada 64772

WORTH COUNTY

(Northwest Missouri Medical Society)

Woman's Auxiliary to MSMA

1973-1974 Officers, Directors and Committee Chairmen

OFFICERS

President
Mrs. Charles R. Willman (Helen)
2105 Lovers La., St. Joseph 64505
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Mrs. George J. Lytton (Vivian)
617 W. 49th, Kansas City 64112
First Vice-President
Mrs. William R. McPhee (Mary Kay)
1205 W. 76th, Kansas City 64104
Second Vice-President
Mrs. Ned B. Chase (Martha)
2931 Indiana, Joplin 64801
Third Vice-President
Mrs. George P. Wilson (Sue)
918 West Winds Dr., Columbia 65201
Fourth Vice-President
Mrs. Robert Stewart (Jane)
201 Driftwood Dr., Sedalia 65301
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Mrs. Thomas Thale (Janette)
351 Meadow Brook, Ballwin 63011
Treasurer
Mrs. Harry E. Raybuck (Jean)
22 Rolling Rock Ct., St. Louis 63124
Auditor
Mrs. L. O. Muench (Virginia)
1530 Riverview Dr., Washington 63090
Corresponding Secretary
Mrs. Clem DuMont (Nell Marie)
1905 Francis, St. Joseph 64501
Parliamentarian
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3110 Douglas, St. Joseph 64506

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603 Quincy, Smithville 64089
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410 N. Rutherford, Macon 63552
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Mrs. J. Otto Lottes (Dorothy)
1028 Winwood Dr., St. Louis 63124
Fourth District
Mrs. William Moore (Lou)
7777 N. Noland Blvd., St. Louis 63121
Fifth District
Mrs. Harold Robb (Betty)
1117 Leslie Blvd., Jefferson City 65101
Sixth District
Mrs. John Brazos (Helen)
Rt. #2, Sedalia 65301
Seventh District
Mrs. Charles E. Nickson (Brenda)
4425 Larson, Kansas City 64133
Eighth District
Mrs. Walter A. German (Taney)
2659 S. Luster, Springfield 65804
Ninth District
Mrs. Claude Cooper (Myrtice)
Thayer 65574
Tenth District
Mrs. F. J. Biggs (Virginia)
808 N. Main, Poplar Bluff 63901

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Aging and Homebound
Mrs. Carl R. Slaughter (Barbara)
1001 N. Woodland Dr., Kansas City 64118
AMA-ERF
Mrs. Larry Ozenberger (Dixie)
302 Birch Ave., Plattsburg 64477
Co-Chairman
Mrs. Philip A. Boyer (Elaine)
10246 Cedar Brook La., Kansas City 64131
Archives
Mrs. George J. Lytton (Vivian)
617 W. 49th, Kansas City 64112
Bylaws
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2931 Indiana, Joplin 64801
Children and Youth
Mrs. James Key (Dona)
2278 Englewood, Springfield 65801
Community Health Education (Programs)
Mrs. R. Philip Acuff (Diane)
3015 Miller Rd., St. Joseph 64506
Community Health Services (Projects)
Mrs. W. Jack Stelmach (Pat)
4303 W. 93rd Terr., Prairie Village, Kan. 66207
Courtesy
Mrs. Albert D. Cross (Vera)
1903 Moberly Rd., Trenton 64683
Doctors' Day
Mrs. A. J. Campbell (Janet)
1500 W. 16th, Sedalia 63501
Environment
Mrs. Raymond Hartwig (Sylvia)
3110 Tomahawk, Shawnee Mission, Kan. 66208
Finance
Mrs. William B. Rost (Frances)
2221 Northwest Extension, St. Joseph 64506
Health Manpower
Mrs. Marshall T. Metzgar (Jean)
1205 Fieldcrest, Columbia 65201
International Health
Mrs. Earl Wipfler (Shirley)
405 Duckett Pl., St. Charles 63301
Legislation
Mrs. Gerald L. Miller (Irene)
836 W. 51st., Kansas City 64112
Members-at-Large
Mrs. Donald Fakhoury (Ina)
4332 N. Central, Kansas City 64116
Mental Health
Mrs. Sam Gaston (Lillian)
2720 Ohio, Joplin 64801
"Missouri Doctor's Wife"
Editor, Mrs. Clyde V. Martin (Barbara)
5531 E. Mission Dr., Shawnee Mission, Kan. 66208
Missouri State Medical Foundation (MSMF)
Mrs. James S. Gordon (Jean)
600 Boonville Rd., Jefferson City 65101

Nutrition
Mrs. George Ladyman (Sally)
1403 Lurlyn Rd., Poplar Bluff 63901

Organization and Membership
Mrs. Robert Stewart (Jane)
201 Driftwood Dr., Sedalia 85301

Press and Publicity
Mrs. George P. Wilson (Sue)
918 West Winds Dr., Columbia 65201

Program Development
Mrs. William R. McPhee (Mary Kay)
1205 W. 76th, Kansas Ctiy 64114

Co-Chairmen
Mrs. Truman B. Schertz (Dorothy)
428 N.W. Briarcliff Rd., Kansas City 64116
Mrs. John Balhuizen (Ann)
600 N.W. 42nd Terr., Kansas City 64116
Public Affairs and MMPAC
Mrs. James A. Reid (Pat)
102 East Rea, Marshall 65340
Research and Romance of Medicine
Mrs. Harold Robb (Betty)
1117 Leslie Blvd., Jefferson City 65101
WASAMA
Mrs. G. William Eggers (Mary)
1005 Cowan Dr., Columbia 65201

SPECIAL COMMITTEES

Nominations
Mrs. Keith D. Jones (Ruthanne), *Chairman*
711 S. Holden, Warrensburg 64093
Reading Committee
Mrs. George J. Lytton (Vivian)
617 W. 49th, Kansas City 64112
Mrs. Robert Hunt (Sue)
2021 Sherwood Dr., Cape Girardeau 63701
Mrs. Henry Durst (Betty)
Ivy Lane, Fulton 65251
50th Anniversary
Mrs. Charles E. Nickson (Brenda), *Chairman*
4425 Larson, Kansas City 64133
Mrs. E. F. Butler (Lillian)
3110 Douglas, St. Joseph 64506

Mrs. James A. Reid (Pat)
102 E. Rea, Marshall 65340
Mrs. Frederick E. Wade (Jane)
413 W. 62nd, Kansas City 64113
Mrs. Stanley Peterson (Marjorie)
721 E. Stanford, Springfield 65804

Advisory

Mrs. Frank J. Valach (Annabel)
4 Nassau Circle, Creve Coeur 63141
Mrs. J. Martyn Schattyn (Venus)
9 Huntleigh Downs, St. Louis 63131
Mrs. Charles T. Shepherd (Susan)
10 Covington Meadows, St. Louis 63132

MSMA ADVISORY COUNCIL

Walter T. Gunn, M.D.
4617 Dahla, St. Louis 63116

R. Allen Chandler, M.D.
4177 Broadway, Kansas City 64111

John N. Martin, M.D.
Physicians & Surgeons Bldg.
St. Joseph 64501

CONVENTION DATES

NORTH CENTRAL REGION WORKSHOP—OCT. 18-19, 1973

Stouffer's Cincinnati Inn, Cincinnati

STATE FALL CONFERENCE—OCT. 24-25, 1973

Plaza Inn, Kansas City
Co-Chairmen
Mrs. Donald A. Fakoury
4332 N. Central, Kansas City 64116
Mrs. Sydney L. Bryant
1805 N. 33rd, St. Joseph 64506

MISSOURI STATE CONVENTION—APRIL 4-7, 1974

Crown Center Hotel, Kansas City
Co-Chairmen
Mrs. Pat Barelli
5608 Shawnee Mission, Kan. 66208
Mrs. Gale Jones
817 W. 61st Terr., Kansas City 64113

ORGANIZED COUNTIES AND PRESIDENTS

(Counties Listed Alphabetically)

Audrain
Mrs. Raymond Wilbers (Karen)
1004 Concordia, Mexico 65265
Boone
Mrs. George P. Wilson (Sue)
918 Westwinds Dr., Columbia 65201
Buchanan
Mrs. William Redmond (Muriel)
3102 Jule, St. Joseph 64501
Butler-Ripley-Wayne
Mrs. E. C. Carlson (Dorothy)
1260 Barron Rd., Poplar Bluff 63901

Callaway
Mrs. Richard Osbourn (Dottie)
503 Douglas Blvd., Fulton 65251
Cape Girardeau
Mrs. Robert Hunt (Sue)
2021 Sherwood Dr., Cape Girardeau 63701
Clay
Mrs. Richard Hedges (Philancy)
1017 Southwind Dr., Excelsior Springs 64024
Cole
Mrs. E. David Scott (Virginia)
957 Westwood, Jefferson City 65101

Cooper
Mrs. William Abele (Joyce)
627 Krohn, Boonville 65233
Dunklin
Mrs. Quentin Tarver (Virginia)
1004 W. Washington, Kennett 63857
Franklin-Gasconade-Warren
Mrs. Raymond J. Bozzo (Ruth)
6 Catawba Pl. Washington 63090
Grand River
Mrs. E. W. Allen (Suzanne)
1202 N. Jefferson, Carrollton 64633
Greene
Mrs. M. D. Bonebrake (Jane)
1443 S. Delaware, Springfield 65804
Jackson
Mrs. Raymond Hartwig (Sylvia)
3110 Tomahawk, Shawnee Mission, Kan. 66208
Jasper
Mrs. Charles H. Bentlage (Clo Ann)
1304 Fairmont, Joplin 64801
Jefferson
Mrs. Alfred Ibaviosa (Cathy)
Festus 63028
Johnson
Mrs. Robert Cooper (Jane)
310 Johnson Dr., Warrensburg 64093
Lafayette-Ray
Mrs. T. B. Cook (Margaret)
Dunns La., Richmond 64085
Miller-Morgan-Moniteau
Mrs. Richard Fulks
California 65018
Mineral Area
Mrs. Robert Dettmer (Karen)
1048 Main, Ironton 64683
Pettis
Mrs. Thomas J. Hopkins (Millie)
1506 W. Broadway, Sedalia 65301
St. Charles-Lincoln
Mrs. Ronald Hurd (Judy)
115 S. Cardinal La., St. Charles 63301
St. Louis City
Mrs. Harold Feller (Lillian)
5834 Bermuda Rd., St. Louis 63121
St. Louis County
Mrs. Irvin I. Berwald (Fay)
747 Old Bonhomme Rd., University City 63132
Saline
Mrs. Robert Blalock (Norma)
526 E. Eastwood, Marshall 65340
South Central
Mrs. Marvin Fowler (Bettye)
1302 W. 3rd, West Plains 65775

AUXILIARIES AND COUNTY MEDICAL SOCIETIES LISTED BY DISTRICTS

FIRST DISTRICT: Andrew,* BUCHANAN, CLAY, Clinton,* GRAND RIVER (Caldwell, Carroll, Daviess, DeKalb, Grundy, Harrison, Linn, Livingston, Mercer), Northwest Missouri (Nodaway, Holt, Atchison, Gentry, Worth),* Platte.*

SECOND DISTRICT: Chariton-Macon-Monroe-Randolph,* Clark-Lewis-Scotland,* Marion-Ralls-Shelby,* North Central (Adair, Knox, Putnam, Schuyler, Sullivan).*

THIRD DISTRICT: ST. LOUIS CITY.

FOURTH DISTRICT: FRANKLIN-GASCONADE-WARREN, JEFFERSON, Lincoln-St. Charles, ST. LOUIS COUNTY.

FIFTH DISTRICT: AUDRAIN, BOONE, CALLAWAY, Camden,** COLE, COOPER, Howard,* MILLER-MORGAN-MONITEAU, Montgomery,* Osage.**

SIXTH DISTRICT: Benton,* Henry,* JOHNSON, LAFAYETTE-RAY, PETTIS, SALINE, WEST CENTRAL (Bates, Cass, Cedar, St. Clair, Vernon).

SEVENTH DISTRICT: JACKSON COUNTY.

EIGHTH DISTRICT: Barton,* Dallas-Hickory-Polk-Dade,* GREENE, JASPER, Ozarks** (Barry, Christian, Lawrence, McDonald, Newton, Stone, Taney),* Webster.*

NINTH DISTRICT: Carter-Shannon,* Mid-Missouri (Crawford, Dent, Laclede, Maries, Phelps, Pulaski),* SOUTH CENTRAL (Douglas, Howell, Oregon, Ozark, Texas, Wright).

TENTH DISTRICT: Bollinger,** BUTLER-RIPLEY-WAYNE, CAPE GIRARDEAU, DUNKLIN, MINERAL AREA (Iron, Madison, Reynolds, St. Francois, Washington), Pemiscot,* Perry-Ste. Genevieve, SEMO (Mississippi, New Madrid, Scott, Stoddard).*

CAPITALIZED COUNTIES—Organized Auxiliary.
* No organized Auxiliary.
** No Medical Society.

STATE PAST-PRESIDENTS—1924-1973

Mrs. George H. Hoxie* (Jackson)**	1924-25
Mrs. M. P. Overholzer* (West Central)	1925-26
Mrs. Arthur B. McGlothlan (Buchanan)**	1926-27
821 N. 24th, St. Joseph 64506	
Mrs. W. M. Bickford* (Saline)	1927-28
Mrs. Willard Bartlett, Sr. (St. Louis City)	1928-29
53 Westmoreland Pl., St. Louis 63108	
Mrs. M. P. Ravenal* (Boone)	1929-30
Mrs. A. W. McAlester* (Jackson)	1930-31
Mrs. U. J. Busiek (Greene)	1931-32
1635 E. Walnut, Springfield 65802	
Mrs. David S. Long (West Central)	1932-33
M. 40, Lake Lotawana, Lee's Summit 64063	
Mrs. Hudson Talbot (St. Louis City)	1933-34
St. Matthew Manor, 227 Brown's Lane, Louisville, Ky. 40207	
Mrs. W. H. Goodson* (Clay)	1934-35
Mrs. M. Pinson Neal* (Boone)	1935-36
Mrs. Walter C. Kirchner* (St. Louis City)	1936-37
Mrs. Charles H. Werner* (Buchanan)	1937-38
Mrs. Herbert L. Mantz (Jackson)	1938-39
1209 Romany Rd., Kansas City 64113	
Mrs. Paul F. Cole (Greene)	1939-40
1819 Main, Quincy, Ill. 62301	
Mrs. S. P. Howard* (Cole)	1940-41
Mrs. J. J. Drace (Cape Girardeau)	1941-42
903 Bellevue, Cape Girardeau 63701	
Mrs. Frank L. Davis* (St. Louis City)	1942-43
Mrs. Robert C. Haynes (Saline)	1943-44
754 Eastwood, Marshall 65340	
Mrs. J. B. McCubbin* (Callaway)	1944-45
Mrs. Harry M. Gilkey* (Jackson)	1945-46
Mrs. W. E. Koppenbrink, Sr. (Lafayette-Ray)	1946-47
1303 Main, Higginsville 64037	

---

* Deceased.
** National President.

Mrs. W. L. Allee* (Miller-Morgan-Moniteau) 1947-48

Mrs. August A. Werner* (St. Louis City) ... 1948-49

Mrs. John J. O'Connell (St. Louis County) .. 1949-50
1937 O'Connell Ave., Overland 63114

Mrs. Gretchen Van Del McClean (Jackson) 1950-51
3510 Front St., San Diego, Calif. 92103

Mrs. W. Carey Cheek (Greene) 1951-52
1535 E. Meadowmere, Springfield 65804

Mrs. Richard A. Sutter (St. Louis County)** 1952-53
7215 Greenway Dr., University City 63130

Mrs. C. Alex McBurney (Saline) 1953-54
927 Hurt, Slater 65349

Mrs. Wilfred E. Martin (Lafayette-Ray) ... 1954-55
403 E. 2nd, Odessa 64076

Mrs. Frank B. Leitz (Jackson) 1955-56
308 W. 116th, Kansas City 64114

Mrs. Charles T. Shepherd (St. Louis County) 1956-57
10 Covington Meadows, St. Louis 63131

Mrs. Armand D. Fries (St. Louis City) 1957-58
11 W. Geyer Lane, St. Louis 63131

Mrs. Henry C. Bauman (Nodaway-Holt-Atchison-Gentry-Worth) 1958-59
929 W. 3rd, Maryville 64468

Mrs. Stanley S. Peterson (Greene) 1959-60
721 E. Stanford, Springfield 65804

Mrs. Jordan Kelling (Lafayette-Ray) 1960-61
P. O. Box 171, Waverly 64096

Mrs. Frederick E. Wade (Jackson) 1961-62
413 W. 62nd, Kansas City 64113

Mrs. J. Martyn Schattyn (St. Louis County) 1962-63
9 Huntleigh Downs, Frontenac, St. Louis 63131

Mrs. Lawrence S. Crispell (Jasper County) . 1963-64
911 Kensington, Joplin 64801

Mrs. Delevan Calkins* (St. Louis City) . . 1964-

Mrs. Ralph Woods Bohnsack (Grand River) . 1964-66
635 Skyline Dr., Brookfield 64628

Mrs. Wallace R. Stacey (Jackson) 1966-67
3407 Shady Bend Dr., Independence 64052

Mrs. John M. Williams (Clay) 1967-68
616 Ridgeway Dr., Liberty 64068

Mrs. E. F. Butler (Buchanan) 1968-69
3110 Douglas, St. Joseph 64506

Mrs. James A. Reid (Saline) 1969-70
102 E. Rea, Marshall 65340

Mrs. William M. Walker (Greene) 1970-71
845 Southern Hills Blvd., Springfield 65804

Mrs. Frank J. Valach (St. Louis County) .. 1971-72
4 Nassau Circle, Creve Coeur 63141

Mrs. Keith D. Jones (Johnson) . . . 1972-73
711 S. Holden, Warrensburg 64093

Roster of Woman's Auxiliary Members by Society

AUDRAIN COUNTY
(Mexico 65265)

Boyce, Mrs. John M., 725 Lakeview
Cottey, Mrs. John H., 203 West Blvd.
Daut, Mrs. Donald W., 5 Park Circle
Davis, Mrs. Leonard L., Jr., 5 Melody La.
Dwyer, Mrs. Thomas L., 301 N. Cole
Ekern, Mrs. H. Peter, 1415 S. Morris
Garcia, Mrs. Charles L., 8 Melody La.
Huq, Mrs. Md Nasrul, 3 Meadow Lake Dr.
Jolley, Mrs. J. F., 726 W. Monroe
Jolly, Mrs. Ben N., 1421 S. Jefferson Rd.
Kallenbach, Mrs. G. P., Rt. 5
Kittelberger, Mrs. George William, 1101 West St.
Lankford, Mrs. Harold D., 9 Park Circle
O'Brien, Mrs. Harry F., 408 Harvard
Parrish, Mrs. J. C., 206 West State, Vandalia, 63382
Rodes, Mrs. Ned, 625 Lakeview Rd.
Rouse, Mrs. David M., 1415 Hickory Hill
Wallace, Mrs. Ed. S., 811 S. Jefferson
Wilbers, Mrs. Raymond, 1004 Concordia

BOONE COUNTY
(Columbia 65201)

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Allen, Mrs. Joseph, 5813 St. Charles Rd.
Allen, Mrs. Robert, 4900 St. Charles Rd.
Allen, Mrs. William, 508 W. Briarwood La.
Arnold, Mrs. Richard C., 814 Yale
Asel, Mrs. Norman, 1112 S. Glenwood
Baker, Mrs. James M., Rt. 4
Baker, Mrs. Sherwood A., 2620 Walther Ct.
Barbee, Mrs. Charles W., 303 Brewer Dr.
Black, Mrs. Samuel, 300 S. Glenwood
Blackwell, Mrs. Charles, 3109 W. Rollins
Bruner, Mrs. Claude, 208 Edgewood
Bumgarner, Mrs. James E., 1815 West Rollins Rd.
Bumgarner, Mrs. Roger W., 707 Timberhill Rd.
Burns, Mrs. Thomas, 310 E. Brandon Rd.
Bynum, Mrs. William R., 2606 Luan Ct.
Carnahan, Mrs. Charles E., 3801 Cedar La.
Chalkley, Mrs. Judson, 614 W. Stewart Rd.
Chapman, Mrs. C. Larry, 1916 Ridgemont
Cheek, Mrs. Charles W., 2700 Malibu Ct.
Cochran, Mrs. Donald, 112 Sappington
Colwill, Mrs. Jack M., Countryshire, Rt. 5
Cooper, Mrs. Maurice, 1000 Wayne Rd.
Cope, Mrs. James, Rt. 1, Rocheport 65279
Crowley, Mrs. William J., 7-E. Lathrop
Culley, Mrs. Thomas, 1506 University
Darnell, Mrs. Thomas F. B., 2617 Walther Ct.
Denninghoff, Mrs. James C., 1906 Vassar
De Weese, Mrs. Marion, 807 Stewart Rd.
Dexheimer, Mrs. Frank, 1004 Hulen Dr.
Dexter, Mrs. James D., 510 Fairview Rd.
Eggers, Mrs. G. William, Cowan Dr. #1005
Ferneau, Mrs. James, 1040 Queen Ann Dr.
Foote, Mrs. Jerry E., Rd. 4
Frueh, Mrs. Bartley, 108 Parkhill Dr.
Fuchs, Mrs. George, Jr., 1026 Hickory Hill Dr.
Galeota, Mrs. William, 1719 Ridgemont
Gammel, Mrs. George, 1602 Stony Brook
Garrett, Mrs. Glen, 102 E. Brandon Rd.
Gaunt, Mrs. William D., 1117 S. Glenwood
Glass, Mrs. Robert L., 811 Hulen Dr.
Griffin, Mrs. William T., 822 Greenwood Ct.
Guthrie, Mrs. Richard, 601 W. Briarwood
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Hardwicke, Mrs. Henry, Ashland 65010
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Harris, Mrs. Robert J., 2505 E. Broadway
Harrison, Mrs. Winston, 1220 Sunset Dr.
Hart, Mrs. William, 109 Sappington Dr.
Haw, Mrs. Marvin, 1807 Jackson
Henry, Mrs. Lawrence D., 1909 Princeton
Hubbell, Mrs. Ira G., 302 McNab Dr.
Hueser, Mrs. James, 604 W. Broadway
Ide, Mrs. Carl, 600 Laurel Dr.
Jackson, Mrs. Robert L., 1103 W. Stewart Rd.
Johnson, Mrs. Richard E., 129 Lindell Dr.
Keown, Mrs. Kenneth, 402 Westmount
Kerr, Mrs. Earl S., 1308 Fieldcrest
La Chance, Mrs. Leopold, 324 S. Collier, Centralia 65240
Ladenson, Mrs. Roland, 704 Westmount
Landhuis, Mrs. Leo R., Rt. 3
Leech, Mrs. Charles A., 815 W. Stewart Rd.
Leeper, Mrs. Sidlee W., 606 W. Stewart Rd.
Litwiller, Mrs. Raymond W., 1312 W. Broadway
Lodwick, Mrs. Gwilym S., 403 Lexington Sq.
Logue, Mrs. John, 912 Crestland
Lohmar, Mrs. Roland E., Rt. 5, Box 335
Longnecker, Mrs. David, 2304 Topaz Dr.
Marco, Mrs. Philip J., 1015 College Park Dr.
Mayer, Mrs. William D., 1 Ridgeley Rd.
McElroy, Mrs. Glenn, 3909 W. Broadway
Metzgar, Mrs. Marshall T., 1205 Fieldcrest
Miller, Mrs. LeRoy, 32 Bingham Rd.
Mitchell, Mrs. Frank, 2208 Danforth Ct.
Mitchell, Mrs. Lynn D., 200 Defoe Dr.
Moshy, Mrs. Larry D., 107 E. Brandon
Orth, Mrs. O. Gerald, 2404 Beachview Dr.
Payne, Mrs. David, 1901 Ridgemont
Payne, Mrs. John, Rt. 5, Fulton 65251
Perez-Mesa, Mrs. Carlos, 609 Stewart Rd.
Pfefer, Mrs. Leland U., 2409 Bluff Blvd.
Pingleton, Mrs. William, 113 Tracy Dr.
Politte, Mrs. Lenard, 2401 Hendrix Dr.
Pugh, Mrs. Reginald, 206 S. Glenwood
Rall, Mrs. Kenneth L., 1121 Danforth Dr.
Reddin, Mrs. Patrick C., 1704 Oakwood Ct.
Ridenhour, Mrs. C. E. Gene, Rt. 1, Cedar Grove
Rink, Mrs. Richard A., 209 Rothwell Dr.
Robinson, Mrs. Robert R., Jr., Apt. B-8, 2917 W. Rollins Rd.
Rodgers, Mrs. Elrie, 202 S. Glenwood
Ross, Mrs. Gilbert, Rt. 1
Russell, Mrs. Garth, 1210 W. Broadway
Scheuber, Mrs. Charles, 505 W. Boulevard S.
Sights, Mrs. Warren P., 903 Westover
Simmons, Mrs. Earl M., 2216 Ridgefield Dr.
Smith, Mrs. J. Ned, Jr., 701 W. Boulevard S.
Smith, Mrs. Joe R., 222 East Parkway
Somers, Mrs. John, Rt. 3
Sosehee, Mrs. Lee, 1507 W. Broadway
Spratt, Mrs. John, Jr., 105 S. Glenwood
Spurgeon, Mrs. Milo, 404 Edgewood
Stephenson, Mrs. Hugh E., 5 Danforth Circle
Stewart, Mrs. W. B., 1401 Ridgemont
Stewart, Mrs. William J., 1011 Queen Ann Dr.
Stoy, Mrs. Robert, 811 Canterbury Dr.
Struessel, Mrs. Kenneth, 3605 Evergreen La.
Thomas, Mrs. Robert M., 2215 Danforth Ct.
Vandervoort, Mrs. Robert L., 3813 Cedar La.
Waggoner, Mrs. Charles, 712 Hilltop Dr.
Wakerlin, Mrs. George E., 3002 Bray Ave.
Washington, Mrs. Edward L., 204 W. Stewart Rd.
Watson, Mrs. Trevor F., 2319 Bluff Blvd.
Wilson, Mrs. George P., 918 Westwinds Dr.
Wilson, Mrs. John, 1117 Woodhill Rd.
Wilson, Mrs. Vernon E., 300 E. Briarwood La.
Windmiller, Mrs. M. Eugene, 210 S. Glenwood

BUCHANAN COUNTY
(St. Joseph)

Acuff, Mrs. Robert P., 3015 Miller Rd. 64506
Andres, Mrs. Edward, 3306 Neighbor Rd. 64506
Baker, Mrs. W. C., Savannah 64485
Beck, Mrs. Paul, 3216 Coronado, 64505
Beheler, Mrs. Edward, 35 Ridgeland Rd. 64505
Benson, Mrs. Scott, 4515 Stonecrest Terr. 64506
Berney, Mrs. Francis, 1225 N. 10th 64501
Bryant, Mrs. Sydney, 1805 N. 33rd 64506
Butler, Mrs. E. F. Butler, 3110 Douglas 64506
Callman, Mrs. George, P. O. Box 655, Fairleigh Station 64506
Chiarottino, Mrs. Joseph, 419 N. 21st 64501
Christ, Mrs. Martin, 414 Benton Dr. 64504
Cox, Mrs. John P., 4208 Miller Rd. 64505
Craig, Mrs. Owen, 2408 Colony Sq. E. 64506
Craig, Mrs. Richard O., 4106 Miller Rd. 64505
DuMont, Mrs. Clement, 1905 Francis 64501
Durham, Mrs. S. L., Dearborn 64439
Fischer, Mrs. Martin, 2914 Joslin La. 64506
Fisher, Mrs. Joseph, 2903 Ashland 64506
Forgrave, Mrs. John, 2611 Cornell 64506
Forgrave, Mrs. Leon Paul, Hundley Dr. 64506
Forman, Mrs. George W., 2412 Ashland 64506
Garrison, Mrs. David L., 5101 E. Crest Ct. 64506
Grimes, Mrs. Manning, 815 N. Noyes Blvd. 64506
Gunter, Mrs. Joe S., 5710 Karrasch 64505
Hartigan, Mrs. F. X., 2602 Frederick 64506
Hayes, Mrs. Paul W., 610 N. Noyes Blvd. 64506
Herman, Mrs. Allen, 1909 N. 32nd 64506
Howden, Mrs. T. L., 2723 Francis 64501
Ide, Mrs. Lucien, 1416 N. 25th 64506
Kieber, Mrs. R. W., 1915 N. 33rd 64506
Kline, Mrs. Edmund, 17 Stonecrest 64506
Knepper, Mrs. Paul, 2002 Ashland 64506
Kulowski, Mrs. Jacob, 5106 Stonecrest Terr. 64506
Lee, Mrs. Carleton H., 2716 Douglas 64506
Lehman, Mrs. Philip, 91 Stonecrest 64506
Luckinbill, Mrs. Paul, Plattsburg 64477
Maginn, Mrs. R. L., 12 Wishbone Rd. 64506
Marston, Mrs. F. James, 2114 Lovers La. 64505
Martin, Mrs. John, 9 Lindenwood La. 64505
McDaniel, Mrs. John, 1808 N. 29th 64506
McDonald, Mrs. Wilbur, 6 Country Club 64505
McGlothlan, Mrs. A. B., 821 N. 24th 64506
Moen, Mrs. Berwyn H., 2214 Carper Dr. 64506
Morse, Mrs. John Philip, 2212 Lovers La. 64505
Morse, Mrs. Marvin, 2702 Faraon 64501
Mothershead, Mrs. John L., 2630 Fairleigh Terr. 64506
Ness, Mrs. Carl, 8 Lindenwood La. 64505
O'Brien, Mrs. Liam, State Hospital, Box 263, 64502
O'Connor, Mrs. William B., 2316 N. 22nd 64505
Ozenberger, Mrs. Larry, West Grogan, Plattsburg 64477
Petersen, Mrs. Harold E., 2902 Frederick 64506
Pfeffer, Mrs. Robert, 1915 N. 29th 64506
Pifer, Mrs. Lawrence, 2120 Manchester Rd. 64505
Potter, Mrs. Caryl Jr., 1 Pine Rd. 64505
Potter, Mrs. Thompson, 2106 Lovers La. 64505
Prokop, Mrs. Joseph, 29 Stonecrest 64506
Redmond, Mrs. William, 3102 Jule 64501
Riddell, Mrs. Richard V., 2610 Indian Trail Dr. 64506
Rogers, Mrs. John, 2502 Ashland 64506
Rosenthal, Mrs. Irwin, 5007 Stonecrest Terr. 64506
Rost, Mrs. William, 2221 Northwest Ext. 64506
Roundy, Mrs. Collis, Rd. 2 64505
Saferstein, Mrs. T. H., 2903 Sherman 64504
Senne, Mrs. Herbert, 1308 S. Noyes 64507
Senor, Mrs. Earl, 2920 Renick 64507
Shevlin, Mrs. Charles F., 840 N. 25th 64506
Smith, Mrs. Clifton, 2821 Ashland 64506
Stallard, Mrs. Donald, 1417 N. 25th 64506
Stevens, Mrs. Edward, 2923 Joslin La. 64506
Thompson, Mrs. F. Gregg, III, 2714 Ashland 64506
Villahermosa, Mrs. Juanito, 511 Crestview Dr., Savannah 64485
Wadlow, Mrs. Ernest E., 2611 Lovers La. 64506
Waggoner, Mrs. Sharon E., 5820 S. 3rd 64504
Weed, Mrs. Randall W., 1821 Clay 64501
Weinand, Mrs. Ernest, 2002 N. 29th 64506
Whitsell, Mrs. Ora Earl, 2306 Sacramento 64507
Willman, Mrs. Charles, 2105 Lovers La. 64505

BUTLER-WAYNE-RIPLEY COUNTIES
(Poplar Bluff 63901)

Barbour, Mrs. Marvin, 1721 N. Main
Biggs, Mrs. Fred J., Jr., 808 N. Main
Brookreson, Mrs. A. Davis, Lurlyn Rd.
Caldwell, Mrs. Fred, 2008 King Rd.
Carlson, Mrs. E. C., 1260 Barron Rd.
Christy, Mrs. John, 1708 Sylvan Dr.
Engelhardt, Mrs. Robert C., 1513 Rosedale La.
Frazier, Mrs. Andrew, 1337 Meadow La.
Gernstetter, Mrs. S. L., P. O. Box 337
Hansbrough, Mrs. Eugene T., Lurlyn Rd.
Hoja, Mrs. W. Alexander, Rt. 2, Box 16
Hunt, Mrs. John, Rt. 6
Kneibert, Mrs. F. L., 1301 Barron Rd.
Ladyman, Mrs. George H., 1405 Lurlyn Rd.
McCauley, Mrs. B. J., 115 Elm
McLane, Mrs. Jerry F., 2107 Jackson Rd.
Miller, Mrs. David V., Rt. 1
Parker, Mrs. Arthur C., Jr., 708 Selma
Ramirez, Mrs. Ricardo, 2022 King Rd.
Raper, Mrs. Charles A., Rt. 2, Box 17 B
Reddy, Mrs. S. K., 2630 N. 14th
Robertson, Mrs. William E., 900 North
Ruff, Mrs. T. Eugene, 1411 Rosedale
Schriver, Mrs. Ronald, 820 Oak Hill Dr.
Tapp, Mrs. Ernest M., 1401 Lurlyn Rd.
Till, Mrs. Bennie, 2030 Meadows Rd.
Traxel, Mrs. William L., 2624 Valley Crest
Tuma, Mrs. A. T., 1601 Big Bend Rd.
Varma, Mrs. D. K., 2506 N. Main
White, Mrs. Barry B., 2521 Park Pl.
Woods, Mrs. Tom, 2008 Schweitzer Dr.

CALLAWAY COUNTY
(Fulton 65251)

Brown, Mrs. John J., 1304 N. Vine
Cremer, Mrs. William J., State Hospital Dr.
Domke, Mrs. Herbert R., Rt. 2, New Bloomfield
Durst, Mrs. Henry, 1 Ivy Lane
Groce, Mrs. George, 1 Bartley La.
Jackson, Mrs. Vernon, State Hospital Dr.
Osbourn, Mrs. Richard, 503 Douglas Blvd.
Peterson, Mrs. Donald, State Hospital # 1
Ritterbusch, Mrs. James K., 2 Bartley La.
Sydow, Mrs. Henry, 1411 Kenwood Dr.
Wood, Mrs. George F., 1700 Plaza Dr.

CAPE GIRARDEAU COUNTY
(Cape Girardeau 63701)

Alyea, Mrs. James, 1869 Drury La.
Bahn, Mrs. Charles, 2418 Brookwood Dr.
Barnes, Mrs. Seth, 1854 Broadway
Blankenship, Mrs. Dale, 907 W. Cape Rock Dr.
Bowman, Mrs. Kirk, 1965 Robinhood Circle
Burford, Mrs. Edwin, 2424 Terrie Hill
Campbell, Mrs. Edward, 1100 N. Henderson
Chapman, Mrs. Jean Allen, 1150 N. Henderson
Cozean, Mrs. Charles, 1548 Oak Lei
Crowe, Mrs. John, 1000 N. Henderson
Dinkins, Mrs. James, 1323 Perryville Rd.
Downey, Mrs. Patrick, 3218 Kage Hills
Elrod, Mrs. D. B., 2500 Fairlane
Elrod, Mrs. Dennis, 2500 Fairlane
Essmeyer, Mrs. Joe, Rt. 2, Box 533-A
Estes, Mrs. Albert, 714 Broadway
Herbert, Mrs. Charles, 648 Sylvan La.
Holcomb, Mrs. John, 825 N. Fountain
Horne, Mrs. Paul, 1909 Huntington
Hunt, Mrs. Robert, 2021 Sherwood Dr.
Jaeger, Mrs. J. M., Shady La., Jackson 63755
Johnson, Mrs. Earl, 1044 N. Henderson
Johnson, Mrs. E. D. Jack, 1742 Lake Shore Dr.
Jung, Mrs. Marshall, Box 427, Illmo 63754
Kasten, Mrs. Melvin, 1209 Sailor Circle
Keim, Mrs. J. H., 1845 Woodlawn
Kinder, Mrs. James, Rt. 1, Box 135
Kinder, Mrs. Jerry L., 2426 Brookwood
Kratz, Mrs. Paul, 1720 Cecilia
Lovinggood, Mrs. Thomas, 2505 Allendale Dr.
Magaletta, Mrs. George, 957 Rodney Dr.
McDonald, Mrs. Eugene, 225 W. Main, Jackson 63755
McGinty, Mrs. Charles, 2918 Independence
Nunnelly, Mrs. Gordon, 1432 Themis
Oehler, Mrs. William, 1617 Themis
Otto, Mrs. Thomas, 511 Alta Vista
Parsons, Mrs. Leroy, Chateau Oaks
Rapp, Mrs. Harold, 1011 N. Henderson
Reynolds, Mrs. Garland, P. O. Box 817
Ridings, Mrs. Harold, 96 E. Cape Rock Rd.
Ritter, Mrs. Carl, 2102 Sherwood
Ritter, Mrs. C. J., 2102 Sherwood
Ritter, Mrs. Ray, 1257 Rockwood
Seabaugh, Mrs. L. R., 811 E. Rodney
Shoss, Mrs. Milton, Rt. 1
Sparkman, Mrs. Thomas, 1629 Oxford Dr.
Spence, Mrs. Paul, 2530 Timber La.
Stewart, Mrs. Wendell, 1935 Briarwood Dr.
Talbert, Mrs. Clifford, 1947 Robin Hood Circle
Terry, Mrs. J. W., 2530 Jonquil
Tygett, Mrs. Glenn, 834 Alta Vista
Weeks, Mrs. George, 1814 Scott's La.
Wilson, Mrs. Charles, Oak Lei Dr.
Wolff, Mrs. Paul G., 90 E. Cape Rock Rd.

CLAY COUNTY
(Kansas City)

Adams, Mrs. Howard, 1905 Snow Drop Circle, Liberty 64068
Allen, Mrs. Louis, 501 S. Woodland Dr. 64118
Armstrong, Mrs. Jay, 4812 Black Swan Dr., Shawnee Mission, Kan. 66216
Arst, Mrs. Herbert E., 1201 NE 81st 64118
Balhuizen, Mrs. John, 600 N.W. 42nd Terr. 64116
Bates, Mrs. G. Comer, 102 E. 43rd N. 64116
Bowles, Mrs. Richard, 414 N. Ridge, Liberty 64068
Burk, Mrs. E. K., 630 N.W. 42nd Terr. 64116
Castillo, Mrs. Michael, 530 N.W. 43rd Terr. 64116
Chastian, Mrs. Maurice W., 3 N.E. 47th 64116
Chiles, Mrs. David, 405 Maple, Smithville 64089
Cook, Mrs. Jerry W., 6904 N. Dawn La. 64151
Del Muro, Mrs. F., 4694 N. Highland 64116
Denton, Mrs. Robert, 716 Manzonola, Smithville 64089
Dernoncourt, Mrs. John, 603 Quincy, Smithville 64089
Devine, Mrs. Mark, Jr., 8105 W. 72nd, Shawnee Mission, Kan. 66204
Dolan, Mrs. C. Terrance, 1128 N.E. 97th Pl. 64155
Edwards, Mrs. Theodore, 512 N.W. 43rd Terr. 64116
Fakhoury, Mrs. Donald A., 4332 N. Central 64116
Flanders, Mrs. Virgil E., 2002 W. 91st, Leawood, Kan. 66206
Fotopoulos, Mrs. Chris, 2917 Cheyenne Circle 64116
Fowler, Mrs. I. Charles, 700 E. Barnes Ave. 64118
Gauer, Mrs. Robert J., 525 N.W. 43rd Terr. 64116
Gilani, Mrs. Abdallah, 418 Kingsley, Liberty 64068
Haley, Mrs. Ted M., 4121 N. Briarcliff Rd. 64116
Hayes, Mrs. Lawrence L., 440 N. Woodland Dr. 64118
Hedges, Mrs. Richard, 1017 Southwind Dr., Excelsior Springs 64024
Hodge, Mrs. Robert H., 2204 N.E. 39th 64116
Huddleston, Mrs. Harvey, 402 4th St. Terr., Smithville 64089
King, Mrs. Phillip, 529 Fairview, Liberty 64068
Kirkland, Mrs. Jerry, 6604 N.W. Overland Dr. 64151
Kuenzi, Mrs. Donald E., 924 S. Woodland Dr. 64118
Langhus, Mrs. Melvin, 104 W. Englewood Dr. 64118
Lanning, Mrs. R. James, 213 W. Greentree La. 64116
Littlejohn, Mrs. Robert, 5215 W. 63rd Terr., Shawnee Mission, Kan. 66208
McCluggage, Mrs. Newt C., 6133 N. Jefferson 64118
McCormick, Mrs. James, 309 Northcrest Dr. 64116
McPhee, Mrs. William R., 1205 W. 76th 64114
Mullins, Mrs. B. L., 510 N.E. 106th 64155
Parker, Mrs. Robert H., 112 E. 43rd N. 64116
Perico, Mrs. Carlos, 8446 Juniper, Prairie Village, Kan. 66027
Perry, Mrs. Lawrence L., Jr., 6300 N. Lenox 64151
Pileggi, Mrs. Felix A., 424 W. Briarcliff Rd. 64116
Purcell, Mrs. Paul, 4 Carver, Smithville 64089
Reeder, Mrs. Charles C., 3 Maple Circle, Smithville 64089
Revare, Mrs. Paul, 3245 Chippewa Dr. 64116
Robinson, Mrs. Van M., N.W. Briarcliff Ct. 64116
Schertz, Mrs. Truman B., 428 N.W. Briarcliff Rd. 64116
Schultz, Mrs. Robert, 1532 N. Withers Rd., Liberty 64068
Schutz, Mrs. John P., 304 Virginia, Excelsior Springs 64024
Slaughter, Mrs. Carl, 1001 N. Woodland 64118
Somoza, Mrs. Jose, 15 N.E. Hill 64116
Soper, Mrs. William, 203 Garden La, Excelsior Springs 64024
Spelman, Mrs. Arch E., 500 N. Bridge, Smithville 64089
Sportsman, Mrs. Weldon L., Rt. 2, Smithville 64089
Stratman, Mrs. Clarence A., 1500 N.E. 57th Terr. 64118
Thomas, Mrs. Anthony, 6221 N. Askew 64119
Triplett, Mrs. Daniel A., 936 Scott Dr., Liberty 64068
Vaughn, Mrs. James W., 5509 W. 86th, Shawnee Mission, Kan. 66208
Vilmer, Mrs. Charles E., 6209 W. 65th, Shawnee Mission, Kan. 66202
Wald, Mrs. Donald, 1608 E. 69th N., Gladstone 64118
Waterman, Mrs. Franklin M., 420 Glendale Rd., Liberty 64068
Werner, Mrs. Dean F., 4609 N. Main 64116
Werner, Mrs. Franklin C., 422 Sagamore La. 64116
Williams, Mrs. R. D., 6533 Rainbow, Shawnee Mission, Kan. 66208
Withrow, Mrs. John B., 3925 N. Main 64116
Workman, Mrs. Charles E., 6609 Milhaven Dr., Shawnee Mission, Kan. 66202
Wright, Mrs. Earl, 8196 N.W. Kirkwood Dr. 64151

COLE COUNTY
(Jefferson City 65101)

Allen, Mrs. James Edwin, 846 Crestmere
Belden, Mrs. E. A., 2124 Lowell
Bohrer, Mrs. Lois A., 5304 La Jolla Hermosa, La Jolla, Calif. 92037
Bowe, Mrs. Ted, 2503 Schellridge Dr.
Bradley, Mrs. William, 1705 Greenberry Rd.
Bregant, Mrs. Robert, 3435 Country Club Dr.
Courter, Mrs. Larry, Rt. 4
Cox, Mrs. William A., 812 Swifts Highway
Davidsson, Mrs. Walter Flavius, 225 Fredricks La.
Dorris, Mrs. Richard P., 1611 Ridgewood
Doyle, Mrs. Matthew J., 2411 Livingston
Enloe, Mrs. L. David, 1200 Moreland
Exon, Mrs. C. Stuart, 916 Boonville
Files, Mrs. James, 330 Sterling Price Rd.
Fullgrabe, Mrs. Emil A., 1915 Green Meadow Dr.
Garner, Mrs. Lynn M., 403 Meier Dr.
Garner, Mrs. Royal, Rt. 1, Box 2658, Holts Summit 65043
Gordon, Mrs. James, 600 Boonville Rd.
Gove, Mrs. Herman S., 712 Broadway
Guhleman, Mrs. Henry V., Jr., 2018 Greenberry Rd.
Gurnee, Mrs. Landon, 2941 Country Club Dr.
Handler, Mrs. Fred P., 614 Boonville Rd.
Hauser, Mrs. Robert, Schott Rd.
Kanagawa, Mrs. Harold Hajime, 816 Houchin
Kanagawa, Mrs. Harold K., 314 Crest Dr.
Kelly, Mrs. Marshall W., 1916 Greenberry Rd.
Klebba, Mrs. Larry, 3300 Country Club Dr.
Leslie, Mrs. James P., P.O. Box 666, Jackson, La. 70748
Leslie, Mrs. James, Jr., 1824 Brookside Blvd.
Lloyd, Mrs. Earl L., Riviera Heights, Holts Summit 65043
Matthews, Mrs. John I., 1314 Moreau Dr.
McHaney, Mrs. John W., 1819 Brookside
McKnelly, Mrs. William, 1106 Lee
Meier, Mrs. Francis X., 1913 Hayselton Dr.
Meinershagen, Mrs. Charles W., 138 Forest Hill
Moseley, Mrs. Otis Okle, P. O. Box 248, Osage Beach 65065
Ossman, Mrs. Julian A., 2407 W. Main
Ringo, Mrs. Henry, Centertown 65023
Robb, Mrs. Harold, 1117 Leslie Blvd.
Russell, Mrs. Joseph P., 1717 Greenberry Rd.
Ryan, Mrs. Thomas J., 1109 Moreau Dr.

Sanders, Mrs. Jack Shelby, 1820 Brookside Blvd.
Schmidt, Mrs. Jerome H., 806 Boonville
Schokker, Mrs. Johannes, 3463 Hobbs La.
Scott, Mrs. David, 957 Westwood
Sennott, Mrs. John Stephen, 123 Douglas Dr.
Shull, Mrs. G. Donald, 1925 Hayselton Dr.
Siu, Mrs. Kenneth C., 1009 Fairmount Blvd.
Stauffer, Mrs. Harry Beach, 830 Boonville Rd.
Stricker, Mrs. Harold C., 1205 Moreau Dr.
Sugarbaker, Mrs. Everett D., 2113 W. Main
Summers, Mrs. Joseph, Jr., 2313 W. Main
Tanner, Mrs. Robert, 1910 Greenberry Rd.
Taylor, Mrs. Leon, 1104 W. Main
Tietjen, Mrs. Fred, 7 Greentree Rd.
Van Vranken, Mrs. Eugene E., 2037 Tower Dr.
Wallace, Mrs. John K., 220 Ridgeway
Watts, Mrs. Byron Edward, 2112 Forest Dr.
Winegar, Mrs. Alvon, 1602 Jefferson Heights

COOPER COUNTY
(Boonville 65233)

Abele, Mrs. William Arved, Krohn Dr.
Avery, Mrs. Willard Bartlett, 10 Oak Valley Rd.
Diekroeger, Mrs. Manuel Louis, Rt. 2
Hata, Mrs. Daikichi, 7 Morningside Dr.
Humphreys, Mrs. Ed. Tristran, 1123 3rd
Stuart, Mrs. Byron McClellan, 910 Shamrock Terr.
Winn, Mrs. George Warren, 607 Poplar
Ziegler, Mrs. William Henry, Weylan Dr.

DUNKLIN COUNTY
(Kennett 63857)

Benson, Mrs. Leo J., Jr., 204 Wiggs
Cash, Mrs. Charles R., 1112 White Oak Pl.
Croom, Mrs. D. W., Malden 63863
Dunmire, Mrs. George, 504 S. Baker Dr.
Garrison, Mrs. Norman A., Jr., 1009 S. Jackson
Legan, Mrs. John K., 617 Butter Dr.
Miltenberger, Mrs. Paul C., 705 W. Washington
Moorehead, Mrs. Wm. E., Malden 63863
Palenske, Mrs. R. L., Hornersville 63855
Peck, Mrs. C. R., 234 S. Main
Pu, Mrs. Pin H., 1105 W. 8th
Tarver, Mrs. Quinton, 1004 W. Washington
Wilson, Mrs. L. C., 915 S. Jackson
Zimmerman, Mrs. Joe A., 1105 White Oak Pl.

FRANKLIN-GASCONADE-WARREN COUNTIES

Baker, Mrs. Donald L., Rt. 1, Union 63084
Bonney, Mrs. Samuel C., 2 Southpoint Pl., Washington 63090
Bozzo, Mrs. Raymond J., 6 Catawba Pl., Washington 63090
Brenner, Mrs. Paul A., 108 W. Washington Ave., Owensville 65066
Eisenmann, Mrs. Benjamin, New Haven 63068
Farrell, Mrs. S. L., 205 Elm, Washington 63090
Hoelscher, Mrs. H. F., Hickory Haven, Warrenton 63383
Moellenhoff, Mrs. Robert, 2315 E. 5th, Washington 63090
Muench, Mrs. Ludwig, 1530 Riverview Dr., Washington 63090
Richardson, Mrs. G. A., Union, Mo. 63084
Richardson, Mrs. W. R., 301 Hwy. 50 West, Union 63084
Schmidt, Mrs. Charles, Box 143, Gerald 63067
Strehlman, Mrs. Benjamin G., 510 West End, Union 63084

GRAND RIVER COUNTIES
(Caldwell-Carroll-Livingston-Grundy-Davies-Harrison-Linn-Mercer-DeKalb Counties)

Allen, Mrs. E. W., 1202 N. Jefferson, Carrollton 64633
Atcheson, Mrs. Windsor, 108 Kavanaugh, Trenton 64683
Bales, Mrs. Eugene, 502 W. 3rd Terr. Carrollton 64633
Bohnsack, Mrs. Ralph, 635 Skyline Dr., Brookfield 64628
Broyles, Mrs. Watkins, Bethany 64424
Cofer, Mrs. Thomas, 1721 Fair, Chillicothe 64601
Conrad, Mrs. Joseph, 1202 Jackson, Chillicothe 64601
Cross, Mrs. Albert, 1903 Moberly Rd. Trenton 64683
Daley, Mrs. Frank, 508 E. Samuel, Hamilton 64628
Dixon, Mrs. John, 1005 Brookfield, Brookfield 64628
Dowell, Mrs. Donald, 1830 Calhoun, Chillicothe 64601
Ellsworth, Mrs. Willard, Cainsville 64632
Fair, Mrs. William, 1705 Calhoun, Chillicothe 64601
Fuson, Mrs. William, 520 Pleasant View, Trenton 64683
Gale, Mrs. Joseph, 1710 Polk, Chillicothe 64601
Galvez, Mrs. Sisenando Patino, Santa Fe St., Marceline 64658
Gearhart, Mrs. Merriam, 2100 Beekman, Bethany 64424
Howell, Mrs. Billy, Rt. L., St. Catherine 64677
Mandler, Mrs. George, 1616 Clay, Chillicothe 64601
Platz, Mrs. John, 804 N. Main, Carrollton 64633
Ryan, Mrs. David, Rt. 4, Trenton 64683
Smith, Mrs. Robert, 321 S. Main, Brookfield 64628
Vandiver, Mrs. V. D., 1024 Grandview, Chillicothe 64601
Yoon, Mrs. Jin Soo, 1500 Burnam Rd., Chillicothe 64601

GREENE COUNTY
(Springfield)

Allison, Mrs. James B., 2507 S. Luster 65804
Allen, Mrs. Jerry, 1324 S. Fairway Terr. 65804
Ancheta, Mrs. A. A., 2024 E. Rosebrier 65804
Anthony, Mrs. Dallas, 1322 S. Pickwick 65804
Ash, Mrs. Charles J., 743 Riverside 65804
Ashley, Mrs. Thomas, 2740 Pythian 65802
Atkinson, Mrs. Thomas, Rt. 9, Box 81-A 65804
Auner, Mrs. Cecil R., 649 McCann 65804
Back, Mrs. Donald, 2852 S. Glendale 65804
Bailey, Mrs. Alan, 2242 Barataria 65804
Baldwin, Mrs. Richard, 2033 Prairie La. 65804.
Barnhill, Mrs. Floyd, 3215 Bellhurst 65804
Beard, Mrs. R. W., 2928 E. Portland 65804
Bentley, Mrs. John, 2830 S. Chantilly 65804
Beisner, Mrs. Don, 1512 Charing Rd. 65804
Berry, Mrs. Paul, 2315 Shady Glen 65804
Blades, Mrs. Ross, 2308 Barataria 65804
Bonebrake, Mrs. McDonald, 1443 S. Delaware 65804
Boone, Mrs. Martin, Rt. 2, Box 315 65802
Broaddus, Mrs. Loren, 2725 S. Patterson 65804
Brown, Mrs. David, 2911 Melbourne Rd. 65804
Brown, Mrs. James T., 1653 S. National 65804
Brown, Mrs. Lyman, 1410 N. Rogers 65802
Burkey, Mrs. Jordon, 2405 Sheridan 65804
Busiek, Mrs. Urban, 1635 E. Walnut 65802
Callaway, Mrs. Guy, Jr., 901 E. Portland 65804
Callaway, Mrs. Guy, 1155 S. Delaware 65804
Carr, Mrs. Phillip, 1260 E. Catalpa 65804
Cheek, Mrs. Anne, 1535 E. Meadowmere 65804
Cheek, Mrs. James, 2342 Fitts La. 65804
Christy, Mrs. Raymond, 2738 S. Marlan 65804
Ciccone, Mrs. Pasquale, U. S. Medical Center 65804
Clarke, Mrs. Michael, Rt. 1, Box 442-A 65803
Clary, Mrs. Wm. W., 2259 Mirabeau 65804
Clawson, Mrs. J. W., 2257 Rosebrier 65804
Clayton, Mrs. Edgar, 2446 Brentwood 65804
Cochran, Mrs. Thomas, 2423 Brentwood 65804
Cordonnier, Mrs. James, 2320 E. Rosebriar 65804
Corry, Mrs. Francis, 2461 Catalina 65804
Cox, Mrs. Eleanor, 1072 Roanoke 65804
Crane, Mrs. John, 1121 S. Weller 65804
Crawford, Mrs. Oral, Rt. 1, Box 443 65803
Crighton, Mrs. John C., 3419 Weaver Rd. 65804
Cunningham, Mrs. D. Dean, 1425 S. Delaware 65804
Delzell, Mrs. W. A., Rt. 1, Willard 65781
Dillard, Mrs. Erin M., Rt. 9, Box 425-B 65804
Dolan, Mrs. Daniel, 2413 Claremont 65804
Domann, Mrs. Darrel, 2506 E. Cherokee 65804
Duncan, Mrs. Robert, 1234 E. Loren 65804
Elkins, Mrs. Ronald, 2830 E. Glenwood 65804
Ellis, Mrs. Francis, 2235 E. Glenwood 65804
Emery, Mrs. Frank, 4308 Ridgeview 65804
Evans, Mrs. E. L., 2457 E. Baratara 65804
Farthing, Mrs. Gene, 1235 E. Walnut 65802
Ferguson, Mrs. John, 1219 S. Clay 65804
Ferguson, Mrs. Lynn, 4111 Ridge Dr. 65804
Fessenden, Mrs. Ersel, 634 E. Kingsbury 65804
Francis, Mrs. William, 2820 E. Glenwood 65804
Freeman, Mrs. S. F., 1339 S. Pickwick 65804
Gentry, Mrs. Michael A., 2151 E. Rosebrier 65804
Gerdes, Mrs. John, 3041 Lamonta 65804
German, Mrs. Walter A., 2659 Luster 65804
Giddings, Mrs. Frank, 1211 S. Pickwick 65804
Giffin, Mrs. James, Rt. 2, Box 91 65804
Gorelick, Mrs. David, 1041 Linwood Terr. 65804
Gose, Mrs. Don F., 1339 S. Delaware 65804
Griot, Mrs. Mary, 1640 E. Sunshine 65804
Hall, Mrs. David, Rt. 2, Rogersville 65742
Hall, Mrs. Durward, 2442 S. Fremont 65804
Hamburg, Mrs. Fredrick, 2757 E. Normandy 65804
Hanan, Mrs. Ernest, 724 E. Kingsbury 65804
Harmon, Mrs. Ben, Rt. 1, Nixa 65714
Harrison, Mrs. S. W., 3031 Shalimar 65804
Harvey, Mrs. Harold, 2531 Brentwood 65804
H'Doubler, Mrs. Alice, Rt. 7, Box 207, 65802
H'Doubler, Mrs. Charles E., 1421 Bedford Rd. 65804
H'Doubler, Mrs. F. T., Jr., 2445 Melbourne Rd. 65804
H'Doubler, Mrs. Peter, 1137 S. Pickwick 65804
Herfkens, Mrs. Kenneth, 2818 Natural Bridge 65804
Hills, Mrs. Joe E., 2917 Natural Bridge 65804
Holland, Mrs. Robert, 2225 E. Edgewood 65804
Hollis, Mrs. Richard, 2236 Englewood Rd. 65801
Holmes, Mrs. Daniel E., Rt. 9, 4318 Sunset 65804
Holmes, Mrs. David R., 2539 Melbourne Rd. 65804
Huewe, Mrs. Douglas, 2204 Clairborne 65804
Ivy, Mrs. H. Berry, 215 E. Sunshine 65804
Jobe, Mrs. Charles, 2415 E. Edgewood 65804
Johnson, Mrs. Fritz, 2435 E. Cambridge 65804
Johnson, Mrs. Joseph, Jr., 2240 Cherryvale 65804
Johnson, Mrs. Warford B., 2244 Edgewood 65804
Johnson, Mrs. William, 973 E. Linwood Dr. 65804
Johnston, Mrs. Joseph, 2855 Southern Hills Blvd. 65804
Jones, Mrs. Harold, 3042 Ridge Dr. 65804
Key, Mrs. James, 2278 Englewood 65801
Klingner, Mrs. George, Turners 65765
Klingner, Mrs. George, Jr., Rt. 3, Box 202, Rogersville 65742
Knabb, Mrs. Kenneth, 1229 E. Catalpa, 65804
Langston, Mrs. W. Roland, 1453 S. Fairway 65804
LeFevre, Mrs. Philip, 2851 E. Covington Circle 65804
Lemmon, Mrs. G. Bruce, 1462 Virginia 65804
Lewis, Mrs. Noel, Rt. 1, Strafford 65757
Litton, Mrs. Lyle, 3044 Shalimar 65804
Lockhart, Mrs. Charles, 1600 E. Catalpa 65804
Loeb, Mrs. Richard, 2924 S. Barnes 65804
Lorenc, Mrs. Ernest, 2819 Canyon Dr. 65804
Lovett, Mrs. Rohert L., 2850 Versailles 65804
Lurie, Mrs. Harold, 2440 Skyline 65804
Maddux, Mrs. Wm., 2634 Inglewood Rd. 65804
Manire, Mrs. John, 532 W. Crestview 65804

Maple, Mrs. Francis, 2115 Edgewood 65804
Maples, Mrs. Ruth, 836 E. Eastwood, Marshall 65340
McAlhany, Mrs. Howard, 1643 E. Catalpa 65804
McKinsey, Mrs. John, 2802 Natural Bridge 65804
McLaughlin, Mrs. Richard, 1021 E. Woodland 65804
Menchetti, Mrs. Don E., Rt. 9 Box 425-A 65804
Mentgen, Mrs. Carl, 3317 S. Southland 65804
Michael, Mrs. Harvey, 2847 S. Chantilly 65804
Milne, Mrs. Jay L., 1903 E. Meadow Dr. 65804
Moore, Mrs. DeArmand, 2306 S. Meadowview 65804
Moseley, Mrs. F. Thomas, 2837 Lomita Circle 65804
Napper, Mrs. Marvin, Rt. 1, Ash Grove 65604
Neu, Mrs. Leo T., 3008 Carlisle Circle 65804
Olson, Mrs. E. Rule, 2645 Wildwood Rd. 65804
Overend, Mrs. Don, 3020 Ridge Dr. 65804
Palcheff, Mrs. Chris L., Rt. 9, Box 400-L 65801
Park, Mrs. William, 815 E. Portland 65804
Parlato, Mrs. George, 2204 Shady Glen 65804
Penninger, Mrs. William, 2246 Claiborne 65804
Peterson, Mrs. Stanley S., 721 E. Stanford 65804
Podrecca, Mrs. Guido, 2550 Brentwood Blvd. 65804
Powell, Mrs. Edwin, 1226 S. Weller 65804
Prater, Mrs. Bill George, 3000 Carlisle Circle 65804
Pruett, Mrs. Paul L., Rt. 9, Box 425 65804
Quinn, Mrs. Paul, 2857 Chantilly 65804
Rinker, Mrs. Carl T., 2930 S. Glendale 65804
Robinson, Mrs. Gary, 2117 E. Montclair 65804
Sala, Mrs. Jose, 2901 Utica 65804
Sauer, Mrs. Paul, Rt. 11, Springfield
Schaeffer, Mrs. Edward, 2356 Wildwood Circle 65804
Schreiber, Mrs. Norman J., 3754 E. Cherry 65802
Schroff, Mrs. Carle H., 2448 E. Broadmoor 65804
Schwartz, Mrs. Eugene, 1315 E. Loren 65804
Schweitzer, Mrs. Fred, 2550 Luster 65804
Shackter, Mrs. Bruce, 2534 Barataria 65804
Shane, Mrs. Ramon, 3165 Glenhaven 65804
Siceluff, Mrs. Joseph, Rt. 9, Box 84-M 65804
Simpson, Mrs. E. L., 2133 Meadowview 65804
Snead, Mrs. William, 2532 Sheridan 65804
Spalding, Mrs. David, 2971 Southern Hills Blvd. 65804
Stewart, Mrs. Robert, 2360 E. Grand 65804
Stufflebaum, Mrs. Robert, 2323 E. Rosebrier 65804
Sturtevant, Mrs. Harwood, 2859 Utica 65804
Sweeney, Mrs. Thomas, Rt. 1, Nixa 65714
Tarrasch, Mrs. Ernest, 2114 Langston 65804
Terry, Mrs. James, Jr., 2830 Chambery 65804
Thomasson, Mrs. David, 2311 E. Glenwood 65804
Tillman, Mrs. Walter, 1220 E. Loren 65804
Tombridge, Mrs. T. L., 2830 S. Marlan 65804
Trotter, Mrs. W. Yates, 1243 E. Catalpa 65804
Turner, Mrs. Glen, 1462 S. Dollison 65804
Vensel, Mrs. Lee, Jr., 2255 Meadowview 65804
Waddell, Mrs. Kenneth, 1126 S. Kentwood 65804
Wakeman, Mrs. J. Newton, 1402 Meadowmere 65804
Walker, Mrs. William M., 2845 S. Hills Blvd. 65804
Warres, Mrs. Herbert, 2614 Englewood Rd. 65801
Webb, Mrs. Richard, 1243 E. Loren 65804
White, Mrs. R. Ned, 3634 Cherry 65804
Williams, Mrs. John, 2245 Fritts La. 65804
Wilson, Mrs. Roy E., Rt. 9, Box 207 65804
Wise, Mrs. Gordon, 2850 Southern Hills Blvd. 65804
Wittmer, Mrs. Samuel, 2314 E. Washita 65804
Wong, Mrs. George, 2908 Avalon 65804
Wooldridge, Mrs. Wilfred, 1126 E. Stanford 65804
Wyrsch, Mrs. Leo, 2056 S. Meadowview 65804
Yancey, Mrs. Daniel, 1133 S. Weller 65804
Zahn, Mrs. Robert, 1528 S. Fairway 65804

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Abrams, Mrs. Bernard M., 1021 W. 69th 64113
Ackerman, Mrs. Norman, 5300 W. 84th, Shawnee Mission, Kan. 66207
Adelman, Mrs. Arthur, 6305 Aberdeen, Shawnee Mission, Kan. 66208
Agee, Mrs. Loren Glenn, Rt. 1, Rantoul, Kan. 66079
Aks, Mrs. Daniel, 3100 W. 68th, Shawnee Mission, Kan. 66208
Alderman, Mrs. Thomas F., 309 E. 127th 64145
Allan, Mrs. James, 290 N. Winnebago Dr. Greenwood 64034
Allebach, Mrs. Hobart, 3020 W. 84th, Leawood, Kan. 66207
Alsop, Mrs. Webb, Jr., 3604 W. 53rd, Shawnee Mission, Kan. 66205
Altringer, Mrs. Arthur, 5630 Mission Dr., Shawnee Mission, Kan. 66208
Ammatelli, Mrs. F. J., 1235 W. 57th Terr. 64113
Anderson, Mrs. Raymond, 6024 State Line, Shawnee Mission, Kan. 66208
Anderson, Mrs. Richard, 1001 Romany Rd. 64113
Andrus, Mrs. Bailey C., 6508 Overbrook Rd., Shawnee Mission, Kan. 66208
Arbah, Mrs. Ali A., 2415 W. 67th, Shawnee Mission, Kan. 66208
Arms, Mrs. Arnold V., 6421 High Dr., Shawnee Mission, Kan. 66208
Arnold, Mrs. John David, 635 E. 45th 64110
Aronoff, Mrs. Michael, 5702 W. 90th Terr., Shawnee Mission, Kan. 66207
Atcheson, Mrs. Bellfield, 6524 Overhill Rd., Shawnee Mission, Kan. 66208
Atwell, Mrs. Floyd, 630 W. 60th Terr. 64113
Bachman, Mrs. Paul, 1206 W. Truman Rd., Independence 64050
Baer, Mrs. Alvin J., 5800 Howe Dr., Shawnee Mission, Kan. 66205
Baker, Mrs. Philip, 11440 E. 47th 64133
Balanoff, Mrs. Arnold Z., 2500 W. 71st, Shawnee Mission, Kan. 66208
Ball, Mrs. David A., 5307 Mission Woods, Shawnee Mission, Kan. 66205
Ballard, Mrs. V. Bryce, 6618 Rainbow, Shawnee Mission, Kan. 66208
Barelli, Mrs. Pat., 5609 Mission Dr., Shawnee Mission, Kan. 66208
Barker, Mrs. James, 8416 W. 88th Terr. Prairie Village, Kan. 66208
Barloon, Mrs. James, 612 E. 66th 64131
Barnard, Mrs. John, 825 W. 52nd 64112
Barnett, Mrs. Gordon, 6568 High Dr., Shawnee Mission, Kan. 66208
Barr, Mrs. Glenn A., 9615 Grandview Rd. 64137
Barry, Mrs. John, 5510 W. 84th, Shawnee Mission, Kan. 66207
Barry, Mrs. William, Sulgrave Apts., 121 W. 48th 64112
Basantz, Mrs. F. Victor, 2025 W. 91st, Shawnee Mission, Kan. 66206
Bass, Mrs. Walter R., 6415 Sterling 64133
Bauer, Mrs. L. W., 4818 W. 80th, Prairie Village, Kan. 66208
Bay, Mrs. Merrill, Rt. 2, Box 440, Blue Springs 64015
Beatty, Mrs. Eugene, 4923 W. 96th Terr., Shawnee Mission, Kan. 66207
Becker, Mrs. Rolfe, 6501 Wenonga, Shawnee Mission, Kan. 66208
Beckloff, Mrs. Gerald, 3518 W. 100th, Leawood, Kan. 66206
Bell, Mrs. Hubert H., 5220 W. 69th, Prairie Village, Kan. 66208
Bell, Mrs. William, 214 Oxford La., Lee's Summit 64063
Bennett, Mrs. J. D., 3216 W. 69th, Shawnee Mission, Kan. 66208
Benoit, Mrs. Hector W., Jr., 2501 W. 64th, Shawnee Mission, Kan. 66208
Benson, Mrs. William F., 3700 W. 65th, Shawnee Mission, Kan. 66208
Berenson, Mrs. Sheldon, 832 W. 63rd 64113
Berlin, Mrs. Roger, 6238 Valley Rd. 64113
Berry, Mrs. G. Neill, 5650 High Dr., Shawnee Mission, Kan. 66208
Berry, Mrs. Maxwell, Sulgrave Apts., 121 West 48th 64112
Bickley, Mrs. James, 2011 W. 81st, Leawood, Kan. 66206
Biggs, Mrs. Alfred, 6551 Wenonga Terr., Shawnee Mission, Kan. 66208
Bikales, Mrs. Victor, 5810 High Dr., Prairie Village, Kan. 66208
Bills, Mrs. Marvin, 3309 W. 68th, Shawnee Mission, Kan. 66208
Black, Mrs. Eugene, 3201 W. 67th, Shawnee Mission, Kan. 66208
Black, Mrs. Thomas, Jr., 7929 Outlook, Shawnee Mission, Kan. 66208
Blim, Mrs. Richard Don, 2209 W. 68th, Shawnee Mission, Kan. 66208
Bohan, Mrs. Peter, 4545 Wornall Rd. 64111
Bordy, Mrs. Marvin, 1911 Romany Road, Shawnee Mission, Kan. 66208
Borenstine, Mrs. Joseph, 7307 Holmes 64131
Borsuk, Mrs. Gregory, 4153 Bryant Dr., Independence 64055
Botwin, Mrs. Arnold, 3600 W. 89th, Shawnee Mission, Kan. 66207
Bowser, Mrs. John, 3701 Madison 64111
Boyd, Mrs. George, 4810 W. 80th, Shawnee Mission, Kan. 66208
Boyer, Mrs. Philip A., Jr., 10246 Cedarbrooke La. 64131
Boylan, Mrs. Peter, 6121 W. 90th Terr., Shawnee Mission, Kan. 66207
Brahy, Mrs. Howard, 512 Linwood Terr., Independence 64050
Brams, Mrs. Jack B., 5050 Oak 64112
Braverman, Mrs. Abe Elliott, 2701 W. 68th, Shawnee Mission, Kan. 66208
Brown, Mrs. Adrian J., 12 E. 63rd 64113
Brown, Mrs. Elwyn S., 200 W. 115th 64114
Brown, Mrs. Menzie H., 9421 Ralston 64134
Brown, Mrs. William R., 8717 Rosewood, Shawnee Mission, Kan. 66207
Brumm, Mrs. L. W., 7421 Wyoming 64114
Bruner, Mrs. Robert, 14909 Little Blue Rd. 64136
Buckner, Mrs. Robert, 3507 W. 87th, Leawood, Kan. 66206
Budke, Mrs. Harold A., 1219 W. 66th Terr. 64113
Buhler, Mrs. Victor, 5212 Belleview 64112
Buie, Mrs. Bruce R., 4601 E. 110th 64137
Bunting, Mrs. Williston, 1231 W. 62nd 64113
Burry, Mrs. V. Fred, 5213 Stanton Dr. 64133
Butcher, Mrs. Robert, 5211 Sunset Dr. 64112
Caffrey, Mrs. Raymond J., 1314 W. Red Bridge Rd. 64114
Caldwell, Mrs. John K., 436 E. 65th 64131
Campbell, Mrs. Frederick, 1032 W. 55th 64113
Campbell, Mrs. John, 6506 W. 51st, Shawnee Mission, Kan. 66202
Capps, Mrs. Eugene C., 7921 El Monte, Shawnee Mission, Kan. 66208
Carder, Mrs. George, 1011 Scott Dr., Liberty 64068
Carlson, Mrs. Hjalmar E., 2709 W. 66th, Shawnee Mission, Kan. 66208
Carmichael, Mrs. Francis, 5841 High Dr., Shawnee Mission, Kan. 66208
Caruso, Mrs. Alfred A., 2018 W. 70th Terr., Shawnee Mission, Kan. 66208
Case, Mrs. William, 10208 Oakridge Dr., Shawnee Mission, Kan. 66212
Casford, Mrs. Ralph, 1236 W. 72nd 64114
Cattaneo, Mrs. Ernest, 9200 Cherokee La., Shawnee Mission, Kan. 66206
Chambers, Mrs. James, 5500 Belinder Ave., Shawnee Mission, Kan. 66205
Chandler, Mrs. Robert A., 6435 Indian La., Shawnee Mission, Kan. 66208
Childs, Mrs. Richard, 5325 Mission Woods, Shawnee Mission, Kan. 66206
Chung, Mrs. Richard, 5100 Hickory Rd. #17 64129
Clark, Mrs. Irving, 2811 Blue Ridge Ext., Grandview 64030
Cochrane, Mrs. Joseph, 7702 Kessler La., Shawnee Mission, Kan. 66204
Cockerell, Mrs. Sanford, 3501 S. Crysler, Independence 64050
Coffey, Mrs. Ralph R., 5211 Wornall Rd. 64112
Cohen, Mrs. Harry K., 417 W. 70th 64113
Cohen, Mrs. Robert Alan, 8226 Cherokee Circle, Leawood, Kan. 66206
Colom, Mrs. George A., 4002 W. 56th, Shawnee Mission, Kan. 66205
Coppinger, Mrs. Thomas A., 8 E. 55th Terr. 64113
Cowan, Mrs. George, Lake Quivira, Kan. 66106

Cox, Mrs. Kenneth E., 5640 Pembroke La., Prairie Village, Kan. 66208
Crocker, Mrs. Albert, 2945 Indiana 64128
Cross, Mrs. Edward, 2608 W. 67th, Shawnee Mission, Kan. 66208
Curran, Mrs. Desmond, 6626 Wenonga Terr., Prairie Village, Kan. 66208
Curts, Mrs. Calvin, 5709 Metcalf Ct., Shawnee Mission, Kan. 66202
Dalton, Mrs. Timothy, 11841 Oak 64114
Davis, Mrs. Donald, 2501 W. 67th, Shawnee Mission, Kan. 66208
Davis, Mrs. Herbert, 4601 Holmes 64110
Davis, Mrs. Jack, 7110 Harecliff Dr. 64133
Davis, Mrs. Robert C., 333 W. Meyer Blvd., Apt. 614 Kansas City 64113
DeFeo, Mrs. Theodore, 4100 W. 90th Terr., Shawnee Mission, Kan. 66207
Demott, Mrs. John D., 4402 Homestead Dr., Prairie Village, Kan. 66208
Dempsey, Mrs. Herbert, 806 Chestnut, Lee's Summit 64063
Dennie, Mrs. Charles, 2600 Verona Rd., Shawnee Mission, Kan. 66208
Dimond, Mrs. E. Grey, 5650 Ward Parkway 64113
Dixon, Mrs. George, 10416 Mohawk La., Leawood, Kan. 66206
Dixon, Mrs. V. L., 2501 W. Paseo 64108
Dlabal, Mrs. L. J., 3729 Blue Ridge Blvd., Independence 64052
Dodge, Mrs. Mark, 5820 State Line Rd., Shawnee Mission, Kan. 66208
Dorsch, Mrs. E. H., 3807 Woodland, Independence 64052
Drake, Mrs. Roy, 6600 Outlook, Shawnee Mission, Kan. 66202
Drisko, Mrs. Robert, 2100 Stratford Rd., Shawnee Mission, Kan. 66208
Dunleavy, Mrs. James, 11330 Madison 64114
Durnell, Mrs. Monaford, D., 308 Lincolnwood, Lee's Summit 64063
Edmonds, Mrs. D. D., 9009 Mission Rd., Leawood, Kan. 66206
Egea, Mrs. Fernando, 9916 Perry Dr., Overland Park, Kan. 66212
Eiseman, Mrs. Gustave, 6520 Overhill Rd., Shawnee Mission, Kan. 66208
Elias, Mrs. David J., 10311 Sheley Rd., Independence 64052
Ellfeldt, Mrs. Howard, 8544 Roe Blvd., Prairie Village, Kan. 66207
Elliott, Mrs. R. Glenn, 6136 Reinhardt Dr., Shawnee Mission, Kan. 66205
Empson, Mrs. Charles, 9257 E. 60th Terr., Raytown 64133
Engelmann, Mrs. Calvin, 2000 W. 68th, Shawnee Mission, Kan. 66208
Ericsson, Mrs. Samuel, 9800 Horton, Shawnee Mission, Kan. 66207
Eshelman, Mrs. A. D., 16705 Larkspur La., Independence 64055
Etzenhouser, Mrs. Merrill, 3318 Oxford, Apt. D., Independence 64052
Etzenhouser, Mrs. Russell, 1317 W. College, Independence 64050
Eubank, Mrs. Dillard, 6020 Elm 64133
Eubank, Mrs. Will, 6113 Lane 64133
Eubank, Mrs. William, 1020 W. 60th Terr. 64113
Evans, Mrs. Lawrence, 1240 W. 69th Terr. 64113
Fairchild, Mrs. Robert, 8425 Reinhardt La., Leawood, Kan. 66206
Farley, Mrs. Claude, 3312 W. 87th, Leawood, Kan. 66206
Farney, Mrs. Jacob, 2721 W. 69th, Shawnee Mission, Kan. 66208
Farnsworth, Mrs. Jesse, 5608 Fairway, Shawnee Mission, Kan. 66205
Fayne, Mrs. Fred, 5816 Wayne 64110
Feist, Mrs. William, 10618 W. 98th Terr., Shawnee Mission, Kan. 66214
Ferris, Mrs. Carl, 629 W. 70th Terr. 64113
Fitzgerald, Mrs. Robert, 8505 Cherokee Pl., Shawnee Mission, Kan. 66206
Flanders, Mrs. Horace, 5161 W. 75th, Shawnee Mission, Kan. 66208
Flatley, Mrs. John, 827 Huntington Rd. 64113
Flynn, Mrs. James, 5720 High Dr., Shawnee Mission, Kan. 66208
Folck, Mrs. William P., 5804 Linden Rd. N.W., Parkville 64152
Forman, Mrs. Louis, 2801 W. 67th, Shawnee Mission, Kan. 66208
Forsythe, Mrs. Lees, 8614 Overhill Rd., Shawnee Mission, Kan. 66206
Forsythe, Mrs. Robert, 6457 Verona Rd., Shawnee Mission, Kan. 66208
Fouts, Mrs. Dallas, Sr., Box 124, Lee's Summit 64063
Fowler, Mrs. Fred D., 1231 W. 56th 64113
Fowler, Mrs. James, 200 W. 53rd Terr. 64112
Fredeen, Mrs. Robert C., 5437 Canterbury Rd., Shawnee Mission, Kan. 66205
Frick, Mrs. J. Paul, 116 Huntington Rd. 64113
Friedman, Mrs. Morris L., 2516 W. 69th, Shawnee Mission, Kan. 66208
Fritzlen, Mrs. Thomas J., 825 W. 63rd 64113
Fuhrman, Mrs. Donald, 3417 W. 68th, Prairie Village, Kan. 66208
Gainey, Mrs. Harold, 4907 Sunset Dr. 64112
Ganley, Mrs. Wm. Coyle, 9927 Walnut Dr., Apt. 103 64114
Garner, Mrs. James H., Jr., 8000 Sagamore Rd., Shawnee Mission, Kan. 66206
Garrison, Mrs. Roy F., 404 W. 67th Terr. 64113
Gauthier, Mrs. Charles, 11319 Summit 64114
Geha, Mrs. Braham, 4 Wycklow, Shawnee Mission, Kan. 66207
Geiger, Mrs. W. A., Jr., 3506 W. 92nd Terr. Leawood, Kan. 66206
Gibson, Mrs. David, 5318 Sunset Dr. 64112
Gillen, Mrs. Billy, 8802 Birch La., Shawnee Mission, Kan. 66207
Gillmor, Mrs. C. Stewart, 420 E. Armour 64109
Ginsberg, Mrs. Norman A., 1220 W. 67th 64113
Gist, Mrs. W. W., 1230 W. 66th 64113
Glasscock, Mrs. Ernest, 6214 High Dr., Shawnee Mission, Kan. 66208
Goldman, Mrs. Stanley, 5734 Windson Dr., Shawnee Mission, Kan. 66205
Goldsich, Mrs. Edward, 5115 W. 81st, Shawnee Mission, Kan. 66208
Goldstein, Mrs. Marvin, 901 W. 113th Terr. 64114
Goodson, Mrs. W. H., Jr., 815 W. 59th 64113
Goolsbee, Mrs. Robert, 6438 Sagamore, Shawnee Mission, Kan. 66208
Gordon, Mrs. Morris, 10527 Walnut Dr. 64114
Gottsch, Mrs. Joseph, 7904 Granada, Prairie Village, Kan. 66208
Green, Mrs. John R., Jr., 3143 Santa Fe Terr., Independence 64055
Griffith, Mrs. John A., Jr., 6500 Granada Dr., Shawnee Mission, Kan. 66208
Growdon, Mrs. John A., 6508 Aberdeen Rd., Shawnee Mission, Kan. 66208
Guastello, Mrs. Mario, 7020 Overhill Rd., Shawnee Mission, Kan. 66208
Gullett, Mrs. Charles, 947 S. Shore Dr., Lake Waukomis 64151
Hahib, Mrs. Henry, 440 E. 74th Terr. 64131
Hagar, Mrs. David, 8800 E. 62nd 64133
Hahn, Mrs. Fred, 12001 E. 48th Terr. 64133
Haight, Mrs. John M., 5609 Blue Ridge Blvd. 64133
Hall, Mrs. Ralph R., 3900 W. 57th, Shawnee Mission, Kan. 66205
Halperin, Mrs. Philip, 6715 W. 52nd, Mission, Kan. 66222
Hamil, Mrs. Lawrence W., 9622 Sagamore, Leawood, Kan. 66206
Hardy, Mrs. H. M., 6606 Overhill Rd., Shawnee Mission, Kan. 66208
Harrin, Mrs. William, 5800 High, Shawnee Mission, Kan. 66208
Hart, Mrs. L. Wayne, 4010 W. 57th, Shawnee Mission, Kan. 66205
Hartwig, Mrs. Fred, 5204 Pawnee Dr., Shawnee Mission, Kan. 66205
Hartwig, Mrs. Raymond, 3110 Tomahawk, Shawnee Mission, Kan. 66208
Hausheer, Mrs. Herman, 12900 E. 36th Terr., Independence 64050
Haynes, Mrs. Solon, 5306 Holmes 64110
Heilman, Mrs. Edward, 12309 Wenonga La., Shawnee Mission, Kan. 66209
Helman, Mrs. Richard, 6540 Wenonga Rd., Shawnee Mission, Kan. 66208
Herdoiza, Mrs. Alfonso W., 7015 W. 66th Terr., Shawnee Mission, Kan. 66202
Herrman, Mrs. George, Apt. 6, 10855 State Line 64114
Hervey, Mrs. William H., 5128 Clark Dr., Shawnee Mission, Kan. 66205
Hibbard, Mrs. Blaine, 2900 W. 53rd, Shawnee Mission, Kan. 66205
Hickerson, Mrs. William, 4207 S. Crysler, Independence 64050
Hill, Mrs. J. H., 8115 Meadow La., Leawood, Kan. 66206
Hink, Mrs. Fred, 524 Hardy, Independence 64053
Hoadley, Mrs. William, 9625 Beverly, Shawnee Mission, Kan. 66212
Hodgson, Mrs. Frank, 1049 W. 55th 64113
Hoeper, Mrs. Samuel, Box 169, Grandview 64030
Hoffman, Mrs. Alan, 9400 Bales 64432
Hollinger, Mrs. Lloyd, 4403 W. 93rd Terr., Shawnee Mission, Kan. 66207
Hollweg, Mrs. Kenneth, 808 W. Meyer Blvd. 64113
Holton, Mrs. Edward, 2817 Westport Rd., Independence 64052
Huet, Mrs. Raul, 8632 Juniper La., Shawnee Mission, Kan. 66207
Hunt, Mrs. Claude J., 615 W. 56th 64113
Hunt, Mrs. Thomas, 6636 Ensley La., Shawnee Mission, Kan. 66208
Hunter, Mrs. Martin, 4100 W. 93rd, Shawnee Mission, Kan. 66207
Hunzicker, Mrs. Warren, 1248 Stratford Rd. 64113
Huse, Mrs. William J., II, 8713 Burch La., Shawnee Mission, Kan. 66207
Ingham, Mrs. Walton C., 9723 Overbrook Rd., Leawood, Kan. 66206
Irvine, Mrs. John, 2500 Red Bridge Terr. 64131
Irwig, Mrs. Fred, 5109 W. 87th, Shawnee Mission, Kan. 66207
Ise, Mrs. Frank A., 6700 W. 66th Terr., Shawnee Mission, Kan. 66202
Jacob, Mrs. Walter, 5301 W. 83rd Terr., Shawnee Mission, Kan. 66207
Jacobs, Mrs. Morton, 6416 Verona Rd., Prairie Village, Kan. 66208
Jacobs, Mrs. Walter Harvey, 6656 Milhaven, Shawnee Mission, Kan. 66202
James, Mrs. Otis, 2810 W. 68th, Shawnee Mission, Kan. 66208
Janes, Mrs. Donald, 4502 W. 82nd Terr., Shawnee Mission, Kan. 66208
Jayaram, Mrs. Marandatalli, 7558 Loma Vista Dr. 64138
Jenah, Mrs. Morteza, 5964 Overhill, Shawnee Mission, Kan. 66208
Johnson, Mrs. Dallas, 5321 W. 96th Terr., Shawnee Mission, Kan. 66207
Johnson, Mrs. Joseph, 707 W. Montcrew Dr. 64114
Johnson, Mrs. Richard, 9305 Wenonga, Shawnee Mission, Kan. 66206
Johnstone, Mrs. Paul N., 117 W. 69th Terr. 64113
Jonas, Mrs. Harry, 11711 Markham, Independence 64052
Jones, Mrs. Gale O., 817 W. 61st Terr. 64113
Jones, Mrs. Samuel, 9915 Cherokee La., Shawnee Mission, Kan. 66207
Jones, Mrs. T. Reid, 6341 Roe, Shawnee Mission, Kan. 66208
Justus, Mrs. John, 5521 Howe Dr., Shawnee Mission, Kan. 66205
Kahn, Mrs. Marvin, 8120 Granada, Shawnee Mission, Kan. 66208
Kanarek, Mrs. Joseph, 6112 W. 87th Terr., Leawood, Kan. 66206
Kandt, Mrs. Ray E., Jr., 8900 Maple Dr., Shawnee Mission, Kan. 66207
Kantor, Mrs. Julius, 6708 High Dr., Shawnee Mission, Kan. 66208
Kantor, Mrs. Samuel, 3604 W. 87th, Leawood, Kan. 66206
Katf, Mrs. Nichola Y., 11812 Central 64114
Kaufman, Mrs. Andrew, 4117 W. 94th Terr., Shawnee Mission, Kan. 66207
Kay, Mrs. Billy, 10326 Sagamore La., Leawood, Kan. 66206
Kayanan, Mrs. Jose, 2310 E. Meyer Blvd. 64132
Keeler, Mrs. James E., 422 E. Meyer 64131
Kelling, Mrs. Douglas, 7705 W. 102nd, Shawnee Mission, Kan. 66212
Kelly, Mrs. Joseph, 8646 Chestnut Circle, Apt. 4, 64131
Keltner, Mrs. Raymond, 8900 Pawnee La., Leawood, Kan. 66206
Kendall, Mrs. Charles A., 604 Red Rd., Independence 64055
Kennard, Mrs. G. Keith, 3658 Madison 64111
Kent, Mrs. Bela, 5839 Cherokee Dr., Shawnee Mission, Kan. 66205
Kettner, Mrs. Edward G., 6510 Milhaven, Shawnee Mission, Kan. 66202
Kiene, Mrs. Richard, 6429 Overbrook, Shawnee Mission, Kan. 66208
Killen, Mrs. Duncan, 1909 W. 70th, Shawnee Mission, Kan. 66208
Kindred, Mrs. Lynn, 4606 W. 82nd Terr., Prairie Village, Kan. 66208
Kitchen, Mrs. W. M., 2700 W. 68th, Shawnee Mission, Kan. 66208

Klein, Mrs. E. H., 7011 Roe, Prairie Village, Kan. 66208
Knight, Mrs. Lyle, 108 Madison La., Lee's Summit 64063
Knoch, Mrs. H. Kermit, 6606 Willow La., Shawnee Mission, Kan. 66208
Koontz, Mrs. Paul G., 301 W. 54th 64112
Kranson, Mrs. Seymour, 11 Hawthorne Pl., Independence 64052
Kurtz, Mrs. Karl, 10012 Wedd Dr., Shawnee Mission, Kan. 66212
Kuruvilla, Mrs. George, 9628 Shepherds Dr. 64131
Kyger, Mrs. John, 3612 Blue Ridge, Independence 64052
Lamar, Mrs. Robert F., 800 W. 53rd Terr. 64112
Lambie, Mrs. Rodger W., 10317 Grant La., Shawnee Mission, Kan. 66212
Lampton, Mrs. Lawrence, 5516 Wyandotte 64113
Landers, Mrs. Burnell, 13101 Delaware Dr., Independence 64055
Landis, Mrs. George K., 10115 Pawnee La., Shawnee Mission, Kan. 66206
Latham, Mrs. Raymond, 3008 W. 67th, Shawnee Mission, Kan. 66208
Lauer, Mrs. Daniel, 8718 Cherokee La., Leawood, Kan. 66206
Layle, Mrs. John, 5500 Chadwick, Shawnee Mission, Kan. 66205
Lee, Mrs. Henry, 9821 Sagamore Rd., Leawood, Kan. 66206
Lee, Mrs. King Y., 10811 W. 100 St. Terr., Shawnee Mission, Kan. 66214
Lemoine, Mrs. Albert, 9200 High Dr., Leawood, Kan. 66206
Lentz, Mrs. Clark, 2600 W. 69th, Shawnee Mission, Kan. 66208
Leo, Mrs. William, 4505 W. 66th, Prairie Village, Kan. 66208
Leonidas, Mrs. John, 13309 W. 83rd, Lenexa, Kan. 66215
Lewis, Mrs. Revis, 1001 W. 56th 64113
Lieberman, Mrs. B. Alhert, 1229 W. 67th 64113
Lindgren, Mrs. Carleton, 12805 E. 38th, Independence 64055
Link, Mrs. Vance, 1201 W. 36th, Independence 64050
Linville, Mrs. Howard, 9905 Cherokee La., Leawood, Kan. 66206
Long, Mrs. R. Stacy, 3343 Blue Ridge Blvd., Independence 64052
Lotito, Mrs. Carlos, 8916 Horton, Overland Park, Kan. 66207
Loutzenhizer, Mrs. James, 11405 Jefferson 64114
Lowell, Mrs. Paul, 4742 Liberty 64112
Lundgren, Mrs. Fred, Jr., 201 W. 116th 64114
Lyddon, Mrs. H. R., Jr., 1221 W. 67th 64113
Lytton, Mrs. George J., 617 W. 49th 64112
Maben, Mrs. Sam, 8954 E. 60th Terr. 64133
MacGee, Mrs. Edwin, 10921 W. 99th Pl., Shawnee Mission, Kan. 66214
Macnaughton, Mrs. Ralph, 7317 High Dr., Shawnee Mission, Kan. 66208
Mallouk, Mrs. Alexander G., 8141 Campbell 64131
Mangels, Mrs. Kenneth A., Sr., 1103 W. 36th Terr., Independence 64050
Mantz, Mrs. Herbert, 1209 Romany Rd. 64113
Markel, Mrs. Larry Gene, 4504 W. 93rd, Shawnee Mission, Kan. 66207
Marks, Mrs. Mark M. 6437 Summit 64113
Martin, Mrs. Clyde, 5531 E. Mission Dr., Shawnee Mission, Kan. 66208
Masucci, Mrs. Joseph M., 11800 Washington 64114
Mayer, Mrs. John H., 1250 W. 67th Terr. 64113
Mayer, Mrs. John H., Jr., 5739 Windsor Dr., Shawnee Mission, Kan. 66205
McCallister, Mrs. Ben, 6431 Norwood, Shawnee Mission, Kan. 66212
McClanahan, Mrs. Robert, 6456 Overbrook Dr., Shawnee Mission, Kan. 66208
McConahay, Mrs. David, 3002 W. 67th Terr., Shawnee Mission, Kan. 66207
McConchie, Mrs. James, Rt. 1, Box 223-B, Grain Valley 64029
McDonald, Mrs. Herbert, 435 W. 58th 64113
McDonnell, Mrs. John, 5411 Central 64112
McGannon, Mrs. Paul, 2201 Arno Rd., Shawnee Mission, Kan. 66208
McIntosh, Mrs. Donald E., 12709 Oakmont Dr. 64145
McKee, Mrs. Wallace, 2020 Stratford, Shawnee Mission, Kan. 66208
McMillan, Mrs. Thomas, 8201 Dearborn, Shawnee Mission, Kan. 66208
Meegan, Mrs. Robert, 401 W. 119th Terr. 64145
Mehta, Mrs. Satish K., 5110 Hickory Rd. 64129
Melgaard, Mrs. S. Ross, 1012 W. 61st 64113
Meyer, Mrs. Paul W., 5160 Sunset Dr. 64112
Meyers, Mrs. Harold, 1901 Brookwood Rd., Shawnee Mission, Kan. 66208
Miles, Mrs. George, 2231 W. 63rd St., Shawnee Mission, Kan. 66208
Milgram, Mrs. Byron A., 1209 W. 66th Terr. 64113
Miller, Mrs. Gerald L., 836 W. 51st 64112
Miller, Mrs. Max I., 4001 W. 66th, Prairie Village, Kan. 66208
Miller, Mrs. Wilson Herrick, 6400 Verona Rd., Shawnee Mission, Kan. 66208
Mitchell, Mrs. Andrew, 4013 W. 73rd Terr., Shawnee Mission, Kan. 66208
Mitchell, Mrs. John D., 6014 Lockton La., Shawnee Mission, Kan. 66205
Mitra, Mrs. Nirmal, 2007 W. 81st Terr., Leawood, Kan. 66206
Mixson, Mrs. William, 6501 Sagamore Rd., Shawnee Mission, Kan. 66208
Montello, Mrs. Samuel A., 4109 Delmar Dr., Prairie Village, Kan. 66208
Mooney, Mrs. Marcel L., 6439 Ensley La., Prairie Village, Kan. 66208
Moreano, Mrs. Armando, 3920 W. 57th, Shawnee Mission, Kan. 66205
Morgan, Mrs. David, 6513 Jefferson 64113
Morris, Mrs. Joseph H., 5017 George 64133
Morrison, Mrs. J. Scott, 8932 Rosewood, Prairie Village, Kan. 66207
Morrow, Mrs. Raymond L., 17 W. 69th 64113
Mosbacher, Mrs. Hugh, 16509 E. 32nd, Independence 64055
Moss, Mrs. Paul, 8701 Walmer, Shawnee Mission, Kan. 66212
Mosser, Mrs. Robert, 8342 Carter, Overland Park, Kan. 66212
Mueller, Mrs. M. J., 11723 Central 64114
Mullen, Mrs. Leo M., 1900 W. 68th, Shawnee Mission, Kan. 66208
Murphy, Mrs. Edward, 317 W. 51st 64112
Murphy, Mrs. Robert J., 6428 High Dr., Shawnee Mission, Kan. 66208
Murray, Mrs. W. Lee, 16 Wycklow, Overland Park, Kan. 66207
Naime, Mrs. Mansour J., 9625 Linden Dr., Shawnee Mission, Kan. 66207
Negrete, Mrs. Abelardo, 6932 Mary, Overland Park, Kan. 66204
Nesselrode, Mrs. John H., 12000 Marbec Trail, Independence 64052
Newman, Mrs. Robert L., 1024 Huntington 64113
Nickson, Mrs. Charles E., 4425 Larson 64133
Noback, Mrs. R. K., 628 W. 67th 64113
Nolan, Mrs. Robert, 10100 Howe Dr., Leawood, Kan. 66206
Noltensmeyer, Mrs. Milton, 3305 W. 50th Terr., Shawnee Mission, Kan. 66205
O'Hearne, Mrs. John J., 5529 High Dr., Shawnee Mission, Kan. 66208
O'Neil, Mrs. James H., 2111 W. 69th Terr., Shawnee Mission, Kan. 66206
Osborne, Mrs. Jere O., 644 W. 69th Terr. 64113
Overesch, Mrs. Harry B., 10804 Grandview Rd. 64137
Ozar, Mrs. Milton B., 1206 W. 62nd 64113
Padfield, Mrs. Earl G., 1900 W. 61st Terr., Shawnee Mission, Kan. 66208
Pakula, Mrs. Sidney F., 333 W. Meyer 64113
Parker, Mrs. Hubert M., 1200 W. Red Bridge Rd. 64114
Penner, Mrs. Stanley, 907 W. 101st Terr. 64114
Perico, Mrs. Carlos, 8446 Juniper, Shawnee Mission, Kan. 66207
Perll, Mrs. Maurice F., 830 W. 61st Terr. 64113
Perry, Mrs. Ralph, 7140 Sni-A-Bar Rd. 64129
Petersen, Mrs. Eugene, 4313 Dover Ave., Independence 64055
Petersen, Mrs. George, 4806 W. 68th, Shawnee Mission, Kan. 66208
Pfeutze, Mrs. Edwin L., 5407 W. 100th Terr., Shawnee Mission, Kan. 66207
Piepergerdes, Mrs. Larry G., 1410 W. 5th, Lee's Summit 64063
Pinkerton, Mrs. Joseph, Jr., 2019 W. 70th Terr., Shawnee Mission, Kan. 66208
Piper, Mrs. Donald, 9929 High Dr., Shawnee Mission, Kan. 66206
Pollock, Mrs. Leo H., 6601 Wenonga Terr., Shawnee Mission, Kan. 66208
Poonawala, Mrs. Huseni, 901 E. 109th Terr. 64131
Pope, Mrs. Charles H., Jr., 14401 E. 44th, Independence 64055
Porter, Mrs. Louis, 6017 McGee 64113
Potts, Mrs. Donald, 18508 E. 30th Terr., Independence 64050
Powell, Mrs. Nelson E., 9521 Linden, Shawnee Mission, Kan. 66207
Preston, Mrs. Albert, Jr., 606 W. Meyer Blvd. 64113
Pugh, Mrs. Richard George, 102 Golfview Dr., Blue Springs 64015
Quer, Mrs. Erich A., 1901 Stratford Rd., Shawnee Mission, Kan. 66208
Raich, Mrs. Robert A., 828 Greenway Terr. 64113
Ramey, Mrs. Ehret O., 8108 Ward Parkway Plaza 64114
Rector, Mrs. Joe Lee, Jr., 3915 W. 53rd, Shawnee Mission, Kan. 66205
Reddin, Mrs. Jack L., 12129 Shady Bend Dr., Independence 64055
Reed, Mrs. William, 5931 High Dr., Shawnee Mission, Kan. 66208
Reinhardt, Mrs. G. Robert, 1201 Romany Rd. 64113
Rhoades, Mrs. Arthur, 111 E. Antioch Rd., Box 292, Lenexa, Kan. 66215
Riller, Mrs. L. E., 1267 W. 61st 64113
Rinck, Mrs. William E., 5933 Rockhill Rd. 64110
Rippey, Mrs. John H., 6551 Wenonga Rd., Shawnee Mission, Kan. 66208
Roberts, Mrs. Sam E., 4550 Warwick Blvd. 64111
Robinson, Mrs. Arthur W., 6600 Wenonga Rd., Shawnee Mission, Kan. 66208
Robinson, Mrs. Ernest Kip, 1015 W. 58th Terr. 64113
Robinson, Mrs. William J., 9931 Lee Circle, Shawnee Mission, Kan. 66206
Robison, Mrs. James Travis, Jr., 4203 W. 92nd Terr., Shawnee Mission, Kan. 66207
Rodgers, Mrs. George H., 10041 El Monte La., Shawnee Mission, Kan. 66207
Rodriquez, Mrs. Rolando, 5012 Reinhardt Rd., Shawnee Mission, Kan. 66205
Rozen, Mrs. Jay I., 9520 Linden, Shawnee Mission, Kan. 66207
Rubin, Mrs. Harvey P., 4606 W. 87th Terr. Shawnee Mission, Kan. 66207
Rubin, Mrs. Sidney, 1287 W. 72nd 64114
Rubnitz, Mrs. Leon, 210 W. 94th 64114
Russell, Mrs. James, 1250 W. 56th 64113
Sabates, Mrs. Felix, 2503 W. 70th Terr., Shawnee Mission, Kan. 66208
Saferstein, Mrs. A. L., 6859 Cherry 64131
Sanders, Mrs. Clarence E., 4700 Roanoke Parkway 64112
Sanders, Mrs. Donald, 11721 Oak 64114
Sanders, Mrs. William E., 1004 W. 66th Terr. 64113
Sasano, Mrs. J. Richard, 4508 W. 93rd, Shawnee Mission, Kan. 66207
Sauer, Mrs. Gordon C., 830 W. 58th Terr. 64113
Schaerrer, Mrs. W. C., 5245 Mercier 64112
Schiffmacher, Mrs. Jack E., 4517 W. 65th, Prairie Village, Kan. 66208
Schillie, Mrs. Gene A., 8232 Linden, Shawnee Mission, Kan. 66208
Schlozman, Mrs. Daniel, 9315 Lamar, Shawnee Mission, Kan. 66207
Schoolmam, Mrs. Arnold, 8705 Catalina Dr., Shawnee Mission, Kan. 66207
Schottman, Mrs. Gerhard W., 5010 W 96th, Shawnee Mission, Kan. 66207
Seely, Mrs. Clark, 3000 W. 68th, Shawnee Mission, Kan. 66208
Seiden, Mrs. Gerald D., 2509 W. 71st, Prairie Village, Kan. 66208
Sells, Mrs. Kenneth, 3706 W. 52nd Pl., Shawnee Mission, Kan. 66205
Shapiro, Mrs. L. M., 6429 Holmes 64131
Sheldon, Mrs. Russell D., 816 W. 58th Terr. 64113
Shifrin, Mrs. Alexander, 1027 W. 69th 64113
Shireman, Mrs. Kenneth, Noland Rd. & 55th Terr., Rt. 3 64133
Shuey, Mrs. Herbert, 933 E. 77th Terr. 64131
Simon, Mrs. Sanford, 5820 Mission Dr., Shawnee Mission, Kan. 66208
Sinclair, Mrs. Alexander B., Jr., 1230 W. 61st Terr. 64113

Sinclair, Mrs. Richard H., 3908 W. 91st, Shawnee Mission, Kan. 66207
Singleton, Mrs. Charles, II, 6518 Maple, Shawnee Mission, Kan. 66202
Singleton, Mrs. J. Milton, III, 9030 High Dr., Leawood, Kan. 66206
Skillman, Mrs. Robert K., 10335 High Dr., Shawnee Mission, Kan. 66206
Skinner, Mrs. John T., 824 Westover Rd. 64113
Slentz, Mrs. Edwin L., 4812 W. 66th Terr., Shawnee Mission, Kan. 66208
Slentz, Mrs. William A., 9835 Pembroke La., Shawnee Mission, Kan. 66206
Slickman, Mrs. Robert A., 4937 Wyoming 64112
Smith, Mrs. Arthur B., 8409 Wenonga Rd., Shawnee Mission, Kan. 66206
Smith, Mrs. Elbert E., III, 5847 Howe Dr., Shawnee Mission, Kan. 66205
Smith, Mrs. Othello D., 5400 W. 83rd, Shawnee Mission, Kan. 66208
Smith, Mrs. Wallace B., 3611 S. Delaware, Independence 64050
Sneid, Mrs. Philip, 4201 W. 90th Terr., Shawnee Mission, Kan. 66207
Snider, Mrs. W. Ray, 10700 E. 56th Terr. 64133
Spafford, Mrs. Allen, 5552 Belinder Ave., Shawnee Mission, Kan. 66205
Spalding, Mrs. Wilbur B., Jr., 6206 Robinson, Shawnee Mission, Kan. 66202
Spurny, Mrs. Otto M., 6400 Cherry 64131
Stacey, Mrs. Wallace R., 3407 Shady Bend Dr., Independence 64052
Staggs, Mrs. William A., 641 E. 45th 64110
Staley, Mrs. Harry R., 4740 Roanoke Parkway 64112
Stanley, Mrs. John, 5307 W. 100th St., Shawnee Mission, Kan. 66207
Statland, Mrs. Harry, 1016 W. 69th Terr. 64113
Statland, Mrs. Morris, 2911 W. 66th Terr., Shawnee Mission, Kan. 66208
Steffen, Mrs. L. F., 9548 Rosewood La., Shawnee Mission, Kan. 66207
Stein, Mrs. Joseph, 400 S. Woodland Dr. 64118
Stelmach, Mrs. W. Jack, 4303 W. 93rd Terr., Shawnee Mission, Kan. 66207
Stephens, Mrs. Jack, 18110 E. 27th, Independence 64057
Stockton, Mrs. Raymond, 5215 W. 81st, Prairie Village, Kan. 66208
Stockwell, Mrs. A. Lloyd, 5736 Windsor Dr., Shawnee Mission, Kan. 66205
Stribling, Mrs. Thomas L., 3808 S. Union, Independence 64055
Sutton, Mrs. Richard L., Jr., 5400 Ward Parkway 64112
Szabados, Mrs. Ernest D., 1901 S. Leslie, Independence 64050
Tarson, Mrs. Solomon S., 5511 W. 85th, Shawnee Mission, Kan. 66207
Tasker, Mrs. Charles B., 2721 W. 67th Terr., Shawnee Mission, Kan. 66208
Terrill, Mrs. Robert, 10223 Lee Blvd., Shawnee Mission, Kan. 66206
Thalblum, Mrs. Harvey, 313 W. 99th 64114
Thomas, Mrs. Christopher Y., Jr., 5830 Mission Dr., Shawnee Mission, Kan. 66208
Thompson, Mrs. C. Leslie, 1256 W. 61st Terr. 64113
Throne, Mrs. Elias M., 10621 W. 102nd, Overland Park, Kan. 66214
Tice, Mrs. Wayne K., 3504 S. Delaware, Independence 64050
Tillema, Mrs. David A., 8015 El Monte, Shawnee Mission, Kan. 66208
Totten, Mrs. Frederick E., 9331 Hayes Dr., Shawnee Mission, Kan. 66212
Toubes, Mrs. Daniel, 9718 Wenonga, Leawood, Kan. 66206
Troeh, Mrs. Richard, 13000 Delaware Dr., Independence 64055
Trowbridge, Mrs. E. H., Jr., 32 Compton Ct., Corinth Downs, Shawnee Mission, Kan. 66208
Tutera, Mrs. D. F., 1260 W. 63rd Terr. 64113
Twin, Mrs. Edward, 8208 Tomahawk, Shawnee Mission, Kan. 66208
Twyman, Mrs. Richard, 1020 W. 56th 64113
Underwood, Mrs. Dick Holland, 9828 Belinder, Shawnee Mission, Kan. 66206
Unger, Mrs. Harold, 221 W. 48th 64112
Valins, Mrs. Eugene, 1209 W. 70th Terr. 64113
Van Biber, Mrs. James T., 3705 Northern Blvd., Independence 64052
Van Thullenar, Mrs. Philip, 5000 Reinhardt Ave., Shawnee Mission, Kan. 66205
Vaughn, Mrs. James W., 5509 W. 86th, Shawnee Mission, Kan. 66207
Vidals, Mrs. Guillermo, 9509 W. 104th Terr., Shawnee Mission, Kan. 66212
Vincent, Mrs. Jack, 2003 W. 67th Terr., Shawnee Mission, Kan. 66208
Virden, Mrs. Herbert, 6533 High Dr., Shawnee Mission, Kan. 66208
Vogel, Mrs. Arthur P., 6524 Willow La., Shawnee Mission, Kan. 66208
Volk, Mrs. George, 109 W. 115th 64114
Voth, Mrs. Harold, 5413 Neosho, Shawnee Mission, Kan. 66205
Wade, Mrs. Frederick E., 413 W. 62nd 64113
Wagner, Mrs. Paul J., Greenwillow Farm, Rt. 1, Greenwood 64034
Walker, Mrs. James, 609 E. 96th 64131
Walker, Mrs. John W., 10336 Mohawk, Shawnee Mission, Kan. 66206
Walker, Mrs. Orville C., 604 Partridge, Independence, Kan. 64050
Wall, Mrs. Leonard A., 5011 Neosho Ave., Shawnee Mission, Kan. 66205
Waltz, Mrs. Charles A., 504 Wedgewood Dr., Blue Springs 64015
Waltz, Mrs. James, Rt. 5, Box 202, Lee's Summit 64063
Waxman, Mrs. Herbert, 2012 W. 81st, Shawnee Mission, Kan. 66206
Weidmaier, Mrs. E. John, 36 N.E. 61st 64118
Weir, Mrs. Robert K., 10015 E. 36th, Independence 64052
Wells, Mrs. Donald E., 1-18 Lake Lotowana, Rt. 4, Lee's Summit 64063
Wells, Mrs. James, 3717 Bell 64111
Wheeler, Mrs. Charles B., 830 W. 53rd 64112
Wheeler, Mrs. John H., 5650 Mission Dr., Shawnee Mission, Kan. 66208
White, Mrs. Charles H., 6518 Overhill Rd., Prairie Village, Kan. 66208
White, Mrs. Stoughton F., 6815 Cherokee La., Shawnee Mission, Kan. 66208
Whiteman, Mrs. John R., 9729 Cherokee La., Leawood, Kan. 66206
Whitman, Mrs. Doyle C., 6836 Cherokee La., Shawnee Mission, Kan. 66208
Whitmore, Mrs. J. Stewart, 1039 W. 58th 64113
Whitten, Mrs. John S., 3823 Trail Ridge, Independence 64055
Wicks, Mrs. Edwin O., 506 N.W. 43rd Terr. 64116
Wilber, Mrs. Robert D., 6056 Mission, Shawnee Mission, Kan. 66208
Wilhelm, Mrs. Warren F., 3100 W. 67th, Shawnee Mission, Kan. 66208
Wilkinson, Mrs. Charles B., 4604 Benton Blvd. 64130
Wilkinson, Mrs. E. A., 6810 Linden La., Prairie Village, Kan. 66208
Williams, Mrs. Frank, 5921 Ward Parkway 64113
Williams, Mrs. George P., 9413 Ralston 64138
Williams, Mrs. Joseph C., Jr., 2209 Arno Rd., Shawnee Mission, Kan. 66202
Williams, Mrs. Thomas A., 9601 Manor Rd., Leawood 66206
Williams, Mrs. Vincent T., 4400 Blue Ridge Blvd. 64133
Willoughby, Mrs. James W., 420 N. Ridge, Liberty 64068
Willoughby, Mrs. Jean B., 1019 W. 69th Terr. 64113
Wilson, Mrs. Clifford, 5531 Neosho La., Shawnee Mission, Kan. 66205
Winer, Mrs. Herbert J., 2103 W. 69th Terr., Shawnee Mission, Kan. 66208
Winer, Mrs. Nathaniel, 1007 Brentwood Circle 64112
Winston, Mrs. Bernard H., 1006 W. 67th 64113
Wise, Mrs. Morris F., 2610 W. 105th, Leawood, Kan. 66206
Wolf, Mrs. Jack, 6125 Morningside Dr. 64113
Woods, Mrs. S. Dwight, 3201 W. 68th, Shawnee Mission, Kan. 66208
Woods, Mrs. Walton C., 9004 E. 73rd, Raytown 64133
Wortmann, Mrs. Robert F., 2819 W. 66th Terr., Shawnee Mission, Kan. 66208
Wright, Mrs. R. Paul, 5715 Metcalf Ct., Shawnee Mission, Kan. 66202
Wu, Mrs. William, 4414 Homestead Dr., Prairie Village, Kan. 66208
Wurster, Mrs. Jerry B., 5746 W. 97th, Shawnee Mission, Kan. 66207
Youll, Mrs. Donald V., 8711 Ensley La., Shawnee Mission, Kan. 66206
Young, Mrs. James E., 9700 Overbrook Rd., Leawood, Kan. 66206
Young, Mrs. J. W., 5443 Mohawk, Shawnee Mission, Kan. 66205
Youngblood, Mrs. James, 1209 W. 58th 64113
Zacharias, Mrs. David L., 7819 N.W. Westside Dr. 64152
Zoglin, Mrs. Nathan, 333 W. Meyer Blvd. 64113
Zoller, Mrs. David, 74 Lake Shore W., Lake Quivira, Kan. 66106
Zwerenz, Mrs. Bruno H., Box 158, Rt. 2, Blue Springs 64015

JASPER COUNTY
(Joplin)

Adams, Mrs. Robert, 1302 Mississippi, 64801
Allen, Mrs. David O., Rt. 4, Box 85 64801
Alquist, Mrs. Dale, 21st & Fairview, Baxter Springs 66713
Bentlage, Mrs. Charles H., 1304 Fairmont Dr. 64801
Bhend, Mrs. David, 2435 E. 12th 64801
Birsner, Mrs. Frank, 1717 River St., Carthage 64836
Black, Mrs. M. H., 2814 Wisconsin 64801
Bladow, Mrs. Terrence, 2703 Missouri 64801
Brandon, Mrs. Frederick, 2609 E. 12th 64801
Burch, Mrs. John E., 1345 Crest Dr. 64801
Butler, Mrs. Patrick, 219 Sergeant 64801
Carnes, Mrs. Victor, 1418 Crestwood Dr. 64801
Chase, Mrs. Ned B., 2931 Indiana 64801
Chesney, Mrs. George W., Jr., 2416 E. 12th 64801
Cohle, Mrs. Richard, 1609 Lilac La., Carthage 64836
Craig, Mrs. Irwin T., 2525 E. 12th 64801
Crawford, Mrs. A. L., 2931 Pearl Ave. 64801
Crispell, Mrs. Lawrence S., 911 Kensington 64801
Curl, Mrs. Howard, 2031½ Pearl 64801
Detar, Mrs. Burleigh, Sr., 410 Jackson 64801
Esther, Mrs. John R., 612 Glenview 64801
Ferguson, Mrs. Ralph, 2319 E. 10th 64801
Ferguson, Mrs. Robert M., 2319 E. 10th 64801
Fritsch, Mrs. Andrew J., 2920 Pearl 64801
Gardner, Mrs. Joe, 710 N. Sergeant 64801
Gaston, Mrs. Samuel, 2720 Ohio 64801
Hamilton, Mrs. Eugene, 2736 E. 15th 64801
Hwang, Mrs. Yung H., 920 Southern Hills, Carthage 64836
Isbell, Mrs. C. H., 1046 S. Garrison, Carthage 64836
Jeans, Mrs. Virgil, 660 Jaccard Pl., Joplin 64801
Kirkman, Mrs. Robert E., 2504 E. 10th 64801
Koehler, Mrs. John W., 1001 Manitou 64801
Longenecker, Mrs. J. L., 2606 E. 14th 64801
Maddox, Mrs. John D., 1330 Crest Dr. 64801
Martin, Mrs. Clarence, 2815 Wisconsin 64801
McGonigle, Mrs. James Patrick, 1037 Campbell Parkway 64801
McPike, Mrs. Lloyd H., 2217 Brownell 64801
Mueller, Mrs. Adolph, 615 Hampton Pl. 64801
Papp, Mrs. Sandor D., 3343 Pearl 64801
Patterson, Mrs. Donald R., 210 Duquesne 64801
Patterson, Mrs. Grover S., 1717 River, Carthage 64836
Pence, Mrs. Wendell, Rt. 2, Box 309, Carthage 64836
Powell, Mrs. Robert, 1818 Galena, Galena, Kan. 66739
Pryor, Mrs. I. J., 2905 Illinois 64801
Roberts, Mrs. Howard H., 650 Jaccard Pl. 64801
Schmidt, Mrs. Herbert J., 820 N. Moffet 64801
Schoeberl, Mrs. C. B., 3111 E. 4th 64801
Schulte, Mrs. Gregory A., 2515 E. 12th 64801
Scorse, Mrs. S. W., 619 W. 2nd 64801
Silliman, Mrs. York, 2625 Wisconsin 64801
Simons, Mrs. Jess, 2401 Jackson 64801
Smith, Mrs. Roland T., 1444 Crestwood 64801
Smith, Mrs. Russell W., 315 Euclid, Carthage 64836
Straub, Mrs. David L., 811 N. Byers 64801

Upsher, Mrs. Albert E., 69 Canterbury La. 64801
Walker, Mrs. Paul, 1022 N. Sergeant 64801
Wieman, Mrs. Harry K., 636 N. Wall 64801
Willcoxon, Mrs. Robert, 1330 Valle Dr. 64801
Wood, Mrs. George H., 530 E. Highland, Carthage 64836
Wooldridge. Mrs. Bart. 1435 Crestwood 64801
Young, Mrs. C. C., 2518 Markwardt 64801

JEFFERSON COUNTY

Albano. Mrs. Benjamin, Crystal City 63019
Albee, Mrs. Roger, Festus 63028
Bai, Mrs. Sangzin, Festus 63208
Bonifacio, Mrs. Andres, Crystal City 63019
Deles. Mrs. Vicente, Crystal City 63019
Donnell, Mrs. Hart, Crystal City 63019
Ibaviosa, Mrs. Alfred, Festus 63028
Judge, Mrs. Thomas, Crystal City 63019
Manalo, Mrs. Gil, Festus 63028
Mayfield, Mrs. Logan, Crystal City 63019
Trinidad, Mrs. Hermanito, Festus 63028

JOHNSON COUNTY
(Warrensburg 64093)

Cooper, Mrs. R. Lee, Rt. 1
Cooper, Mrs. Robert L., II, 310 Johnson Dr.
Damron, Mrs. O. H., 308 Jones
Folkner, Mrs. Albert L., Rt. 1
Hanna, Mrs. Hugh, Rt. 5
Harkness, Mrs. Harry H., Burkarth Rd.
Hobbs, Mrs. George H., Grandview Dr., Rt. 2
Johnson, Mrs. Charles S., 502 Hurricane Hill
Jones, Mrs. Keith D., 711 South Holden
Lederer, Mrs. Charles M., 617 Clark
Maxson, Mrs. T. Redd, Arilen Acres

LAFAYETTE-RAY COUNTIES

Boyston, Mrs. Wayne, Odessa 64076
Brady, Mrs. Hugh, Concordia 64020
Cook, Mrs. Edna, Richmond 64085
Cook, Mrs. Thomas B., Richmond 64085
Cope, Mrs. Joseph S., Lexington 64067
Crozier, Mrs. Frank, Sr., Rt. 2, Richmond 64085
Devault, Mrs. George, Richmond 64085
Johnston, Mrs. Esther, Concordia 64020
Kelling, Mrs. Jordan, Waverly 64096
Koppenbrink, Mrs. W. E., Jr., Higginsville 64037
Koppenbrink, Mrs. W. E., Sr., Higginsville 64037
LaHue, Mrs. William, 402 N. 15th, Lexington 64067
Liston, Mrs. Odis, Oak Grove 64075
Martin, Mrs. W. E., Odessa 64076
Pavlu, Mrs. Robert R., 14 W. 13th, Carrollton 64633
Riley, Mrs. Charles, Rt. 2, Richmond 64085
Vajaranant, Mrs. Manit, N. 17th, Lexington 64067
Ward, Mrs. Joe W., Lexington 64067

MILLER-MONITEAU-MORGAN

Buehler, Mrs. Carl T., Jr., Eldon 65026
Burke, Mrs. J. P., California 65018
Fulks, Mrs. Richard B., California 65018
Gallagher, Mrs. Lionel M., California 65018
Gunn, Mrs. Jack, Versailles 65084
Hall, Mrs. C. Robert, 306 N. VanBuren, Versailles 65084
Latham, Mrs. Kenyon, 200 S. High, California 65018
Lyle, Mrs. Ray, Versailles 65084
Shelton, Mrs. E. O., Eldon 65026
Washburn, Mrs. J. L., Versailles 65084

PETTIS COUNTY
(Sedalia 65301)

Block, Mrs. Jerome, Rt. 2
Boger, Mrs. John W., 2803 Skyline Dr.
Braverman, Mrs. Elliot M., Rt. 3, Walnut Hills
Brazos, Mrs. John, Rt. 2
Campbell, Mrs. Albert J., 1500 W. 16th
Cole, Mrs. William R., Rt. 1, Smithton 65350
Edmonds, Mrs. Robert, 2413 S. Stewart
Edwards, Mrs. David R., 1619 S. Moniteau
Eldenburg, Mrs. Donald, Rt. 2
Erickson, Mrs. H. John, Rt. 3, Walnut Hills
Fisher, Mrs. Stanley D., 2200 S. Kentucky
Gonser, Mrs. Karl B., 1619 W. Broadway
Hopkins, Mrs. Thomas J., 1506 W. Broadway
Hopkins, Mrs. T. S., 524 S. Grand Ave.
Lamy, Mrs. John E., 400½ Dal-Whi-Mo Ct.
Long, Mrs. Frank B., 723 W. 7th
Owens, Mrs. John H., 2616 Plaza
Proctor, Mrs. Donald, 610 W. 3rd
Roberts, Mrs. Paul A., 101 E. Marshall, Sweet Springs 65351
Stauffacher, Mrs. Gordon C., 1313 W. Broadway
Stewart, Mrs. Robert H., 201 Driftwood Dr.
Stockwood, Mrs. Robert C., 2600 S. Quincy
Van Dyke, Mrs. Elmer, Rt. 4, Box 91-A
Worley, Mrs. C. A., 102 W. Ray, Sweet Springs 65351

ST. CHARLES-LINCOLN COUNTIES
(St. Charles 63301)

Baird, Mrs. Keim L., 16 Warwick Ct.
Canty, Mrs. Eugene, 1824 Sibley
Carpenter, Mrs. James, 13417 Manorlac, Creve Coeur 63141
Clay, Mrs. Calvin, 808 Oak
Commerford, Mrs. John, 10 Rio Vista
Connelly, Mrs. Michael, 805 Paddock, Florissant 63033
Creech, Mrs. Joseph. 345 E. Cherry, Troy 63379
Crider, Mrs. Russell, 1875 S. River Rd. 63301
Damron, Mrs. Edward, 602 N. 5th, Elsberry 63343
DelPizzo, Mrs. Ferdinand, 900 Westminster Dr.
DuMontier, Mrs. R. J., O'Fallon 63366
Duncan, Mrs. David, 12911 Cedarledge Ct. 63141
Felder, Mrs. James, 701 Tompkins
Goldkamp, Mrs. John, 10 Shawnee
Gore, Mrs. Glenn, 140 Ladue Pines Rd., Creve Coeur 63141
Hammes, Mrs. Roman, 505 Concordia
Hanlon, Mrs. Russell, 2616 Brookridge La.
Hurd, Mrs. Ronald, 115 S. Cardinal La.
Keller, Mrs. Robert, 712 Parr, Wentzville 63385
Kister, Mrs. George, 236 Thomas
Lensenmeyer, Mrs. Charles, 445 Nantucket
Muenster, Mrs. Vincent, 29 Shawnee Dr.
Muhm, Mrs. Yale, 548 Riverview La.
Olson, Mrs. Richard, 2901 Headland Dr.
Perna, Mrs. Vincent, 14 Rio Vista
Poggemeier, Mrs. William, 140 Prairie Haute
Rice, Mrs. Ronald, 301 Oriole
Roach, Mrs. Edward, 211 Rio Vista
Roter, Mrs. Alex, 11223 Turren, St. Louis 63141
Rother, Mrs. Paul, 7 Elmwood Park
Schneider, Mrs. Thomas, 3208 W. Adams
Shuetz, Mrs. Alfred, 904 Indian Hills Dr.
Soucy, Mrs. John, 4 Weldon Springs Heights
Tassi, Mrs. Albert, 6 Westminster
Thiele, Mrs. Otto, 3100 W. Adams
Towers, Mrs. Orville W., Rt. 1, Box 1
Vafi, Mrs. Houshang, 159 Bellechasse Dr., Chesterfield 63017
Vart, Mrs. Gary Vart, 2620 Park Ave.
Vighi, Mrs. James, 405 Spring Valley Ct., Chesterfield 63017
Westerfeld, Mrs. Roy, Rt. 5, Box 57
Wipfler, Mrs. Earl, 405 Duckett

ST. LOUIS CITY
(St. Louis)

Abel, Mrs. Oliver, III, 6449 Wydown 63105
Anderson, Mrs. John, 57 Kingsbury Pl. 63112
Anglo, Mrs. Luis, 1209 Coronation 63125
Arnot, Mrs. John, 28 Countryside La., Frontenac 63131
Bandle, Mrs. Donald, 3801 January 63109
Bard, Mrs. A. T., 3615 Utah Pl. 63116
Barden, Mrs. Frank W., 41 Beaver Dr. 63141
Bartlett, Mrs. Robert W., 6459 Wydown 63105
Bartlett, Mrs. Willard, Jr., 6345 Ellenwood 63105
Bartlett, Mrs. Willard, Sr., 53 Westmoreland Pl. 63108
Bartnick, Mrs. Mitchell, 6476 Eichelberger 63109
Becker, Mrs. Stanley C., 11959 Emerald Green Dr. 63141
Bell, Mrs. Robert M., 35 Glen Rd. 63119
Benjamin, Mrs. Durand, 7340 Navarre Circle 63123
Bergmann, Mrs. Dwayne, 801 S. Skinker 63105
Bilsky, Mrs. Nathan, 2 Somerset Downs 63124
Boemer, Mrs. Lilburn C., 49 Clermont La. 63124
Bohrer, Mrs. Harry C., 4112 Flora Pl. 63110
Boniuk, Mrs. Isaac, 10 Westfield La. 63131
Boyd, Mrs. Arthur M., 6556 Delor Ave. 63109
Brennan, Mrs. George A., 10546 Hanford 63128
Brown, Mrs. Clyde O., 7419 York Dr. 63105
Brown, Mrs. E. Eugene, 7508 Cromwell Dr. 63105
Bruns, Mrs. Kenneth, 1 Salem Estates Dr. 63124
Budd, Mrs. John J., Jr., 501 Overhills Dr. 63124
Burroughs, Mrs. W. H., 7327 Pershing 63130
Burst, Mrs. Donald O., 61 Trent Dr. 63124
Cannon, Mrs. Edward M., 20 Briarcliff 63124
Cappel, Mrs. Powell, 27 Old Westbury 63119
Carney, Mrs. Joseph E., 6625 Pernod Ave. 63139
Cherre, Mrs. Charles J., 10 Ridgetop 63117
Chipongian, Mrs. Paul, 1672 Foxleigh Ct. 63131
Ciapciak, Mrs. Stanley J., 30 Log Cabin Dr. 63124
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Daake, Mrs. John W., 48 Portland Pl. 63108
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Diehr, Mrs. Alvin H., Park Tower Apts. 63105
Dorton, Mrs. Robert K., 12065 Heatherdance 63131
Dreyer, Mrs. Carl Joseph, 45 Glen Rd. 63119
Dripps, Mrs. Roy C., 7824 Keswick Pl. 63119
Eades, Mrs. Dee W., 6 Kingsbury Pl. 63112
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Fish, Mrs. Virgil O., 2500 Town & Country La. 63131
Fitzgerald, Mrs. Leo P., 7219 Cornell Ave. 63130
Fitzgerald, Mrs. William T., 6425 Rhodes 63109
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Fries, Mrs. Armand D., 11 W. Geyer La.
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Gandlmayr, Mrs. Jack M., 13600 Peacock Farm Rd. 63141
Gantner, Mrs. George E., Jr., 233 Woodbourne Dr. 63105
Gantz, Mrs. John, 10 Muirfield La. 63141
Glaser, Mrs. Martin J., 3550 Hawthorne Blvd. 63104
Glick, Mrs. Harry, 1412 Mason, Rt. 13 63131
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Goldman, Mrs. Melvin L., 8650 Barby La. 63124
Gomez, Mrs. Cesar, 18 Portland Dr. 63131
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Haynes, Mrs. Pugh, 8006 Gannon 63130
Henschel, Mrs. Eugene V., 55 Broadview Dr. 63105
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Hicks, Mrs. Robert S., 733 Sherwood Dr. 63119
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Knight, Mrs. William A., Jr., 12 Briarcliff 63124
Komanetsky, Mrs. William, 7447 Sharp Ave. 63116
Koon, Mrs. Bernard, 207 Crandon Dr. 63105
Kountz, Mrs. William B., 2619 Gurney Ct. 63110
Kowert, Mrs. Edward H., 330 Planthurst Dr. 63119
Krojanker, Mrs. Rolf J., 1060 Purdue 63130
Kronemer, Mrs. Norton, 800 Audubon Dr. 63105
Kuhlman, Mrs. Rohert E., 12 Upper Barnes Rd. 63124
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Lau, Mrs. Luis F., 1467 Reauville Dr. 63122
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O'Sullivan, Mrs. George A., 6181 Lindell 63112
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Kendis, Mrs. Joseph B., 19 Warson Terr. 63124
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Lansche, Mrs. W. Edward, 809 Rampart Dr. 63122
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Lord, Mrs. Richard, 8 Mayfair Rd. 63124
Luehrs, Mrs. Robert O., 900 S. Hanley Rd., Apt. 2A 63105
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Luther, Mrs. George, 112 Wildwood Lane 63122
Magidson, Mrs. S. Joseph, 615 Forest Ct. 63105
Magness, Mrs. Guy N., 7727 Blackberry La. 63130
Malles, Mrs. A. Conrad, 68 Woodoaks Trail 63124
Mayer, Mrs. Robert, 614 Spring Meadows Dr., Ballwin 63011
McLean, Mrs. Royal C., 520 W. Jewel 63122
McNalley, Mrs. M., 2100 Raynor Rd. 63122
Meneses, Mrs. Orlando, 1857 Bopp Rd. 63131
Mezera, Mrs. Raymond A., 7345 Whitehaven Dr. 63123
Middleton, Mrs. Jerry N., 24 Foxboro La. 63124
Miles, Mrs. Paul W., 15 Ridge Creek Rd. 63141
Miller, Mrs. Charles, Jr., 206 N. Fillmore 63122
Molden, Mrs. Charles A., 36 Bellerive Acres 63121
Montes, Mrs. Arturo, 11542 Rosary 63138
Moore, Mrs. Harry G., 17 Westmoreland Pl. 63108
Moore, Mrs. William E., 7277 N. Roland Blvd. 63121
Mueller, Mrs. Robert J., 40 Huntleigh Woods 63131
Myers, Mrs. Ivan, 232 Chasselle La. 63141
Nakada, Mrs. James R., 2 Huntleigh Downs 63131
Ordoukhanian, Mrs. Tatool, 1519 Shoemaker Ct. 63141
Ott, Mrs. Harold J., 29 Bopp La. 63131
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Price, Mrs. Robert, 56 High Valley Dr., Chesterfield 63017
Probst, Mrs. Raymond E., 23 Godwin La. 63124
Racadio, Mrs. Sever, 223 Orrick La. 63122
Ragland, Mrs. John, 624 Kehrs Mill Rd., Ballwin 63011
Rao, Mrs. Carlo, 18 Ladue Estates Dr. W. 63141
Redington, Mrs. James C., Jr., 1 Tuscany Park 63105
Reiches, Mrs. Aaron, 11 Brazillian Ct. 63124
Reilly, Mrs. Pierce J., 825 S. Hanley Rd. 63105
Roberts, Mrs. Harold K., 434 S. Hanley Rd. 63105
Robertson, Mrs. Frank G., 642 N. Forest 63119
Roblee, Mrs. Melvin A., 5 Kingston Manor 63124
Roufa, Mrs. Joseph, 12390 Montsouris Dr. 63141
Rubin, Mrs. Robert, 411 Tregaron Pl. 63131
Ruhling, Mrs. Rudy, 6 Webster Knolls 63119
Schattyn, Mrs. J. Martyn, 9 Huntleigh Downs 63131
Schwartz, Mrs. Melvin M., 61 Lake Forest 63117
Schwarz, Mrs. Luis, 8145 University Dr. 63105
Shah, Mrs. Anwar, 9810 Log Cabin Ct. 63124
Shepherd, Mrs. Charles T., 10 Covington Meadows 63132
Simril, Mrs. Wayne A., 21 Somerset Downs 63124
Sisk, Mrs. James C., 146 Frontenac Forest 63131
Speno, Mrs. Angelo A., 11815 Point Oak 63131
Staehle, Mrs. Melvin, 7325 Ravinia Dr. 63121
Steiner, Mrs. A. J., 8 Country Aire 63131
Sullivan, Mrs. William, 1313 Lockett La. 63122
Sutter, Mrs. Richard A., 7215 Greenway Ave. 63130
Teiber, Mrs. Fred W., 38 Fair Oaks 63124
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Walther, Mrs. Roy A., Jr., 7 High Acres Dr. 63132
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Yanow, Mrs. Mitchell, 8 Rolling Rock 63124
Yap, Mrs. Mardonio, 53 High Valley Dr., Chesterfield 63017

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Wheeler, Mrs. Robert L., 1202 E. South St., Harrisonville 64701
Wray, Mrs. Rolla B., 701 South Adams, Nevada 64772

Component Society Meeting Dates

Audrain County Medical Society—third Tuesday of each month.

Andrew County Medical Society—meets only on call.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month at 7 p.m.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Wayne-Ripley County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month, September through May.

Clay County Medical Society—fourth Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—fourth Tuesday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk-Dade County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—third Monday of each month.

Franklin-Gasconade-Warren County Medical Society—first Tuesday of each month at the St. Francis Hospital, Washington, at 7 PM.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—March, May, October and December.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets first Wednesday of each month at 7:30 PM.

Johnson County Medical Society—meets only on call.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 PM, at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—fourth Tuesday of each month.

Marion-Ralls-Shelby County Medical Society—third Tuesday of each month, 7:30 p.m.

Mid-Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)—fourth Thursday of each month.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Montgomery County Medical Society—meets only on call.

Morgan County Medical Society—meets only on call.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Northwest Missouri Medical Society (Nodaway-Holt-Atchison-Gentry-North)—second Thursday of each month.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald)—second Tuesday of each month, September through June.

Pemiscot County Medical Society—second Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday of each month, September through May.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second Wednesday of each month, September through May.

St. Louis Medical Society—third Tuesday of each month, October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month, September through May.

South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.

Webster County Medical Society—meets only on call.

West Central Missouri Society (Bates-Cass-St. Clair-Vernon-Cedar)—second Thursday of each month.

Remember These Dates!

The 116th

ANNUAL SESSION

of the

Missouri State Medical Association

will be held on

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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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116th MSMA Annual Session
April 4-7, 1974 Kansas City

Everybody experiences psychic tension.

Most people can handle this tension.

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and the psychotropic action of Valium® (diazepam).

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check on whether or not the
nt is presently taking drugs
f so, what his response has
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l history, this information can
you determine initial dosage,
ossibility of side effects and
ltimate prospects of success
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ul adjunct to your counseling,
uld be prescribed only as long
cessive psychic tension per-
nd should be discontinued
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rdous occupations requiring
lete mental alertness, such
iving or operating machinery.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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INDICATIONS: *Therapeutically*, used as an adjunct to appropriate systemic therapy for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

PRECAUTION: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Complete literature available on request from Professional Services Dept. PML.

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aindications: Diabetes mellitus that can be
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uncomplicated and well regulated on in-
acute complications of diabetes mellitus
bolic acidosis, coma, infection, gangrene);
g or immediately after surgery where insulin
spensable; severe hepatic disease; renal dis-
with uremia; cardiovascular collapse (shock);
disease states associated with hypoxemia.
ngs: Use during pregnancy is to be avoided.
utions: 1. *Starvation Ketosis:* This must be
entiated from "insulin lack" ketosis and is
cterized by ketonuria which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.**
2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis.
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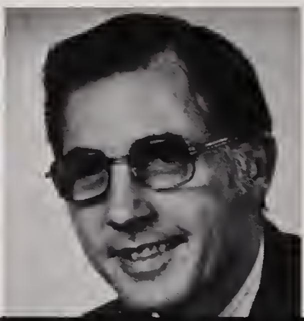
Opinion & Dialogue

"Prescription drugs – who should determine the maker?"

Dispenser of Medicine

Clifton J. Latiolais
President
American Pharmaceutical Association



"Too many doctors are ind
ent to the economic consequen
their decisions." So stated a rec
issue of *Medical News Report* (D
cember 4, 1972), an independe
weekly newsletter published by f
AMA Chief Executive F. J. L. Bla
game, M.D.

Doctor, are you indifferent...?

In discussing an anticipate
crease in Blue Shield rates, Dr. l
ingame's newsletter had this to

"In general, it can be said,
have given the impression they
not particularly concerned with
increase in cost of health care t
patients...

"True, an MD's training is
marily scientific, but in the real
of practice, all of his scientific d
sions have a price tag, or an eco
impact. The economics of healt
beckon the practitioner's attent
Concern for economics of medi

Maker of Medicine

C. Joseph Stetler
President
Pharmaceutical Manufacturers Association

When the pharmacist reco
mends that a drug product othe
the one ordered be dispensed, t
prescriber invariably permits th
change when he feels the best i
ests of the patient will be servec

Shortcomings of Pro-Substitutio Argument

The fact remains that it is
sary for the prescriber to know t
the change is being contemplat
and to be in a position to conser
demur. Without that opportunit
unilateral decision of the pharm
made in the absence of clinical
edge of the patient, could expos
to needless risks, and in additio
jeopardize the relationship betw
the professions of Pharmacy an
Medicine. In my view, there is n
in the pro-substitution argumen
offsets these risks.

The Issue of Drug Knowledge

Substitution advocates cla
that the primary justification fo
changing the rules is the desire
better utilize pharmacists' know
about drugs. Yet the pharmacis
task to keep current on the enti
field of drug therapy, to some d
puts him at a disadvantage. Mo
often, a practicing physician wil
expert knowledge of no more th

Advertisement

ld be an obligation of medical tice...

"Medical societies ought to con- continuing campaigns to point e substantial savings that could alized thru deductible insurance protection for catastrophic ill- . At the very least, they should, in atients' interest, question the cs of any insurance organization raises health care costs by forc- olicyholders to buy insurance may not need or want and prob- won't ever use.

"Too many doctors are indiffer- the economic consequences of decisions. Too many, for ex- e, habitually hospitalize patients e convenience of the MD. It's ense to deny such habits exist...

"Doctors, thru their medical so- es, have unhesitatingly appealed eir patients for support in the against government interference the private practice of medicine. the public in the past has re- ded. It's time the American Med- Association and state and local ical societies paid off the debt by sive action to hold down the cost edical care."

of Drugs

Insurance rates and hospital ges are only two factors in health care costs. The cost of drugs—both prescription and nonprescription—is another.

And when it comes to drug costs, the nation's pharmacists *are concerned*. Through their national professional society, the American Pharmaceutical Association, pharmacists are advising the public to use nonprescription medication cautiously and conservatively, and to seek the advice of their pharmacist before selecting or purchasing such drugs.

Outdated Laws

The pharmacist also is aware that when it comes to prescription drugs, often he has an even greater opportunity to reduce the cost to the patient—with no sacrifice in the quality of the medication dispensed. But in many states, outdated and antiquated laws prevent the pharmacist from engaging in drug product selection. "Drug product selection" simply means that the pharmacist functions in the patient's interest by consciously choosing, from the multiple brands available, a low-cost quality brand of the specific drug to be dispensed in response to the physician's prescription order.

Much *misinformation* has been purposely spread by those who stand to gain financially by maintaining high drug costs to the public. An endless stream of propaganda has emanated from the drug industry in an effort to persuade the medical profession that these so-called anti-substitution laws should be retained. And as long as these laws are retained, the drug industry will continue its current marketing practices which contribute unnecessarily to high drug costs to patients. These practices also are inviting government agencies to expand their restrictive controls on physicians and pharmacists.

APhA Efforts

As pharmacists, we are concerned about health care costs. We hope that every physician shares our concern on this vital issue, and will give his personal support to the constructive efforts APhA has undertaken in the interest of all patients.

(For a complete discussion of drug product selection, you are invited to request a free copy of the "White Paper on the Pharmacist's Role in Product Selection" from: American Pharmaceutical Association, 2215 Constitution Avenue, N.W., Washington, D.C. 20037.)

) drugs that he selects to treat the rity of conditions encountered in ractice. Moreover, the physi- s choice of a specific brand is d on his knowledge of the pa- 's medical history and current ition, and his experiences with articular manufacturer's uct.

Some substitution proponents argued that the dispensing of a cription is a simple two-party action between the pharmacist the patient, and that a substitut- harmacist may avoid even a nical breach of contract by simply ying the patient that he is making ubstitution. I would judge that ourts would be sympathetic rd a pharmacist who substituted out physician approval and who rtook a legal defense that seeks ake the patient responsible for harmacist's actions.

ced Prescription Prices?

Substitution advocates are esting to the consumer, and par- arly the consumer activist, that ced prescription prices could w legalization of substitution. ave seen absolutely no evidence stify this claim. To the contrary, rience in Alberta, Canada, where titution is authorized, suggests the opposite.

Many pharmacists understandably are concerned about the cost of maintaining multiple stocks of similar products. While there is no doubt that inventory costs rise when additional brands are stocked, it would be interesting to know how much they rise, and how many pharmacists actually stock *all* brands — of, say, ampicillin or tetracycline — or how long they keep "slow moving" products on their shelves before they are returned for credit. To ask that the industry eliminate multiple sources is to ask competitors to stop competing.

Drug Substitution—A License for the Unethical

Anti-substitution repeal would favor "corner cutting" pharmacists and manufacturers. For them, free substitution would be not a right, but a license. As an aftermath, it is quite likely that the confidence of both physicians and patients in the profession of Pharmacy would be eroded, as revelations about the unconscionable behavior of an undisciplined few were magnified in the press or in professional circles.

Summary

In short, what the American Pharmaceutical Association advocates as a broad-spectrum panacea looks to us to be not only a minority view (advocacy of substitution is by no means a uniform policy in Pharmacy), but also an extraordinarily costly and ineffective remedy, whose side effects are odious. We believe (1) that an impressive majority of pharmacists prefer to work with Medicine and with industry, for the consumer, and for the general good, (2) that they seek the privilege to substitute when the patient might gain and when the patient's doctor agrees, and (3) that they seek to work for the resolution of genuine grievances openly and professionally.

(For amplification of PMA views, please write for our booklet, "The Medications Physicians Prescribe: Who Shall Determine the Source?" It is available from: Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.)

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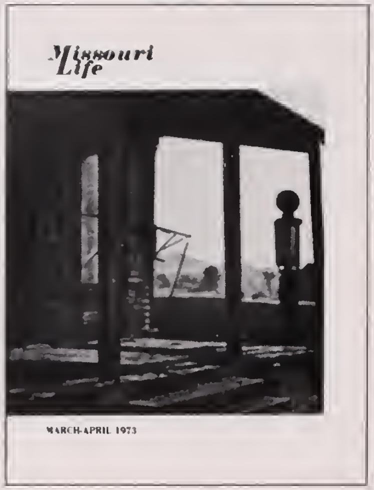
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Special Article

Impact of Changing Pesticide Usage on the Medical Community

By
ANNE R. YOBS, M.D.
U. S. Environmental Protection Agency

This article was developed to alert the medical community to the impact of changes in pesticide usage patterns and potential health problems which may develop consequent to the ban on DDT, which became effective on Dec. 31, 1972. It provides adequate and timely information regarding pesticide poisoning and rapid delivery of correct treatment. Dr. Yobs is Chief, Training and Education Branch, Operations Division, Office of Pesticide Programs, U. S. Environmental Protection Agency.

THE USE OF CHEMICAL SUBSTANCES has been increasing steadily in the modern world, filling man's physical environment with a myriad of substances which are potentially toxic to man himself or to parts of his environment. In trace amounts in the human body, some substances have no demonstrable effects and others are essential to life; in larger amounts, these same substances may be toxic.

Similarly, the number and usage of pesticide products has increased significantly during the last 30 years with the availability of organic chemicals for convenient, effective and economical pest control in a wide variety of situations. Benefits have included increased food production and control of disease vectors and nuisance pests. At first, relatively little effort was directed to safe application and controlled use of these chemicals, and knowledge of possible harmful side effects did not keep pace with the development of chemical pesticides. Beginning in the late 1940s, evidence developed that certain chlorinated hydrocarbon compounds, such as DDT, accumulate in fatty tissues of fish, birds, other wildlife and man. Later, studies showed that excessive concentrations of these pesticide residues have adverse effects on reproduction, physiology and behavior in some birds and represent a threat to wildlife. The hazard to future generations of man is not known, but results of controlled experiments in laboratory animals indicate a need for further investigation.

The general use of DDT in this country was cancelled by the U. S. Environmental Protection Agency effective Dec. 31, 1972 following several years of intensive review and inquiry into the environmental and human health hazards related to the use of this chemical. This administrative action will necessitate a change to other available chemicals, such as organophosphates and carbamates, which have been marketed for a number of years. They are more easily broken down in the environment and in biologic systems and, therefore, pose less risk of long-range contamination and buildup in the environment. However, many of the chemicals which will be substituted for DDT are highly toxic and present greater short-range acute hazard to the user and to others coming into direct contact with them. Since these replacement chemicals are less stable, more frequent application will be required to maintain the same level of pest control, thereby further increasing the hazard—particularly to untrained users.

Project Safeguard, an intensive educational program directed to farmers at risk in 14 states, is a joint effort of the U. S. Environmental Protection Agency, U. S. Department of Agriculture and the State Cooperative Extension Services. The target states include those southern and southeastern states where the greatest use of DDT has occurred in recent years in the treatment of their major crops, cotton, peanuts and soybeans. A special effort also is being made to alert physicians and emergency health personnel in these states to the potential problem and to review diagnostic and treatment measures with them.

Everyone engaged in health delivery should become familiar with all aspects of pesticide poisoning including prevention, populations at risk, signs and symptoms, diagnostic confirmation and treatment. Review of all pertinent details is not possible within the space allotted, but a few salient points should be emphasized.

Pesticide poisoning is preventable if the user reads and observes all label instructions regarding usage, storage and disposal. At risk are not only the farmers or applicators, but, also, their helpers and families.

Pesticides may be absorbed by ingestion, by inhalation or through the intact skin as a result of negligence, accident or deliberate action. Absorption of certain organophosphates is at least as effective following dermal exposure as after ingestion. Dermal exposure is of major importance in occupational poisonings, accounting for 77.5% of the cases of occupational poisonings by industrial and agricultural chemicals in California in one year.[1] There is wide variation in the toxicity of individual compounds within a given group of pesticide chemicals, such as the organophosphates. Malathion has a low toxicity, while Temik, TEPP and ethyl parathion have considerably higher toxicity. Both the organophosphates and the carbamates inhibit acetylcholinesterase; organophosphates are permanent inhibitors, carbamates, reversible inhibitors. Illness results from accumulation of excess acetylcholine and, while similar, may vary in intensity from compound to compound and group to group. Signs and symptoms include sweating, headache, giddiness, miosis, tearing, increased salivation, excessive respiratory tract secretions, nervousness, blurred vision, weakness, nausea, vomiting, abdominal cramps and diarrhea; subsequent symptoms include chest discomfort, cyanosis, papilledema, muscle twitches and, in most severe cases, convulsions, coma and loss of reflexes and sphincter control. Miosis is commonly present, but mydriasis may occur; in either, pupils are nonreactive.[2] If symptoms begin more than six hours after the last known exposure, the illness is probably due to some cause other than pesticides. The end of exposure may be difficult to determine, especially if the patient does not practice good personal hygiene or continues to wear contaminated clothing or protective equipment.

Rapid delivery of correct treatment in suspected cases of pesticide poisoning is of primary importance. Treatment consists of *Support, Decontamination* and *Specific Antidotes* where available. Support therapy includes, most importantly, administering artificial respiration when indicated, while maintaining a free airway. Mechanical means may be used if available; if not, mouth-to-mouth resuscitation should be followed. Oxygen should be administered when cyanosis or severe respiratory difficulty is present. Sedatives may be used with caution to combat hyperexcitability or convulsions; sodium phenobarbital is the drug of choice because of its rapidity of action, but it should be used with care when there is respiratory impairment. After continuation of respiration has been assured, decontamination of the patient should follow promptly to end exposure to the toxic chemical. Depending on the circumstances of exposure, decontamination may include one or more of the following: removal of contaminated clothing, washing of skin and hair, rinsing of eyes, gastric lavage or induction of vomiting and, eventually, evacuation of the intestinal tract.

Specific antidotes are not known for all pesticides, but antidotes of considerable value are available for use in organophosphate poisoning. They are safe enough to administer cautiously on the basis of symptoms before the diagnosis is firmly established. Favorable response to the antidote helps confirm the diagnosis. (Absolute confirmation requires laboratory analysis of proper samples to prove that a sufficient amount of the chemical was in the body at the time of onset of illness.)

Atropine sulfate is a physiological antidote which does not affect the inhibited cholinesterase but blocks of acetylcholine on parasympathetic receptors. Atropine sulfate should be administered to adults intravenously in doses of 2 mg to 4 mg as soon as cyanosis is overcome and should be repeated every five to ten minutes until signs of atropinization appear. In all cases in which atropine treatment is indicated, a mild degree of atropinization should be maintained for 24 hours and for 48 hours or more in severe cases. Doses for children should be proportional to weight, about 0.05 mg/kg body weight. Patients poisoned by organophosphates show an unusual tolerance to atropine because of the accumulation of excess acetylcholine.

Pralidoxime chloride (2-PAM chloride) (Protopam® Chloride, Ayerst Laboratories) is a specific antidote for poisoning by organophosphates, acting to break the bond between the enzyme and the pesticide metabolite. Treatment is more effective if started early and should always be given in conjunction with atropinization. The dose is 1 g for an adult and 0.25 g for infants, given slowly and preferably by infusion for 15 to 30 minutes. If infusion is not practical, the dose may be given slowly by IV injection as a 5% solution in water over *not less than two minutes*. If the first dose produces improvement, it may be repeated after an hour. *2-PAM is contraindicated in suspected carbamate poisoning.*

Patients who require treatment with antidotes should be watched continuously for not less than 24 hours, because serious and sometimes fatal relapse can occur due to continuing absorption or dissipation of the effects of antidotes.

A pamphlet entitled "Diagnosis and Treatment of Poisoning by Pesticides" developed by Project Safeguard discusses pesticide poisoning in more detail and is available in single copies on request to the author at the following address: *Anne R. Yobs, M.D., Chief of Training and Education Branch, Operations Division, Office of Pesticide Programs, U. S. Environmental Protection Agency, 4770 Buford Highway, Chamblee, Ga. 30341.*

References

1. Kay, K.: Environmental Toxicology in Industry and Agriculture. Arch. Environ. Health. 8:208-211, 1964.
2. Hayes, W. J., Jr.: Clinical Handbook on Economic Poisons. Reprinted October 1971. U. S. Environmental Protection Agency. U. S. Gov. Print. Off. Washington, D. C., 1963.

Annual Seminar on Industrial Injuries of the Hand

The annual professional program of the Millikin Hand Rehabilitation Center is scheduled for Sept. 8, 1973 in the East Pavilion Auditorium at Barnes Hospital in St. Louis. The program is limited to "Industrial Injuries of the Hand" and is designed primarily for physicians providing the initial and definitive care of the injured hand.

Preregistration is encouraged, but registration on the day of the program will open at 8:15 AM. The morning session will continue until 12-noon with a coffee break from 10:45-11 AM. Luncheon at Barnes Hospital will be served for the group to facilitate continued discussion of case problems. The afternoon session will be conducted from 1:15 PM until 4 PM with a coffee break at 2:15 PM.

Program topics for the morning session are as follows: "Management of Acute Amputations," R. C. Wray, M.D., Assistant Professor of Surgery (Plastic and Reconstructive Surgery), Washington University School of Medicine; "Management of Crush Injuries," John E. Keiter, M.D., Washington University School of Medicine; "Late Management of Amputation Stumps," Carl Hartrampf, M.D., Northside Hospital, Atlanta, Ga.; "Replantation and Transplantation in Hand Reconstruction," Harry J. Buncke, Jr., M.D., Stanford University, Palo Alto, Calif.; "Fractures and Dislocations of the Metacarpals and Phalanges," Paul M. Weeks, M.D., Director, Milliken Hand Rehabilitation Center, Professor of Surgery (Plastic and Reconstructive Surgery), Washington University School of Medicine; "Fractures and Dislocations of the Carpal Bones," Arthur C. Stein, M.D., Professor of Surgery (Orthopedics), Washington University School of Medicine.

The highlight of the morning session will be the Annual Hand Rehabilitation Center Lecture to be presented this year by Harry J. Buncke, Jr., M.D. Dr. Buncke, an international authority on limb replantation, has been primarily responsible for development of the techniques of replantation.

The afternoon session will include "Emergency Care of the Injured Hand," Arthur C. Stein, M.D.; "Problem Cases," panel consisting of Drs. Buncke, Hartrampf, Stein and Wray; and "Management of the Stiff Hand," Ms. Patricia Phelps, O.T. and Ms. Virginia Woods, P.T., Milliken Hand Rehabilitation Center, Irene Walter Johnson Institute of Rehabilitation, St. Louis. The afternoon session will be highlighted by a presentation of "Determining Disability Ratings of the Upper Extremity," by Mr. John R. Dixon, Attorney at Law, St. Louis.

For additional information, please write to Paul M. Weeks, M.D., Director, Milliken Hand Rehabilitation Center, 4960 Audubon Ave., St. Louis, Mo. 63110.

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The Council Reports

Meeting of June 2-3, 1973

R. Allen Chandler, M.D., Kansas City, Chairman, called the meeting to order. Those present were Drs. Chandler; E. A. Stricker, St. James; John I. Matthews, Jefferson City; Donald Judd, St. Louis; James C. Cope, Columbia; Walter T. Gunn, St. Louis; John N. Martin, St. Joseph; Lysle M. Bach, Hannibal; Max S. Franklin, St. Louis; Louis P. Hetlage, Troy; Robert Bregant, Jefferson City; Howard J. McAlhany, Springfield; Claude W. Cooper, Thayer; E. T. Hansbrough, Poplar Bluff; Stanley S. Peterson, Springfield; J. Loren Washburn, Versailles; Hector W. Benoit, Jr., Kansas City; Joseph V. Finnegan, St. Louis; William D. Mayer and William C. Allen, Columbia; Samuel B. Guze, St. Louis; George E. Thoma, St. Louis; R. K. Noback, Kansas City; Herbert R. Domke, Jefferson City; William L. Donegan, Columbia; Mrs. Charles Willman, St. Joseph; Mrs. George Lytton, Kansas City; Mrs. Terry Watson, St. Louis; Messrs. John Noble, Kennett; Lee Mortenson, Chicago, Ill.; Hollister S. Smith, St. Louis; Allen D. Smith, Kansas City; E. Mark Halvorson, Jefferson City; Ray McIntyre, Tom P. Fox, Royal O. Cooper, C. C. Swarens, Staff.

Dr. Chandler called the meeting to order and requested approval of the minutes of the April 1, 1973 Council Minutes. On motion, duly seconded, the Council Minutes were approved as distributed.

REPORT OF THE EXECUTIVE SECRETARY

Mr. McIntyre read thank you notes from Mrs. Thomas for the retirement gifts recently presented to her; from Mrs. Keith D. Jones expressing appreciation to the Council and Officers for their cooperation during her year as President of the Auxiliary; and from SAMA for renewing MSMA's sustaining membership. He also read a letter from the Missouri State Surgical Society expressing their appreciation for the fine cooperation from the MSMA. Dr. M. Pinson Neal also sent a letter of appreciation for the resolution which was passed in his behalf at the 1973 Annual Session.

Mr. McIntyre stated that the MSMA is presently sending the *AMA Newsletter* to key physicians in Missouri hospitals and asked the Council whether or not this should be continued. On motion, duly seconded, the Council agreed that this practice should be continued.

Mr. McIntyre stated that Dr. Bradshaw had previously asked each Councilor to name a physician in his respective district to his Primary Care Committee. These names should be sent to the State Office or directly to Dr. Bradshaw.

Dr. Benoit has been proposed by the AMA Board of Trustees as a candidate for the Council on Medical Service. Dr. Benoit has served a one-year term on this Council and is up for reelection. MSMA has sent a telegram to Dr. Howard endorsing Dr. Benoit for this post and a number of contacts with state delegations have been made in his behalf.

It was stated that unless there were an objection from the Council, the MSMA would retain membership in the Organization of State Medical Association Presidents. The annual dues are $50.

Mr. McIntyre indicated that a copy of a resolution on PSRO passed by the Georgia House of Delegates was included in the Council folders and said there will be much more discussion on this issue.

The MSMA 1973 House of Delegates passed a resolution regarding a commemorative stamp honoring Dr. William Beaumont. This information was sent to the U. S. Postal Department. The MSMA has been informed that such a commemorative stamp is not possible at this time, but our request will be held for future consideration.

Mr. McIntyre stated that the 1973 House of Delegates passed a statement endorsing the Health Care Foundation of Missouri to be the responsible agency for PSRO activities in Missouri. A letter was sent to Dr. William Bauer, Director, Office of PSRO, informing him of this action. Mr. McIntyre read the letter of reply from Dr. Bauer.

Clarification of insurance coverage for Councilors and Officers while on official business had been requested. Mr. Fox researched this matter and stated that Councilors and Officers are covered under our present insurance policy when on official business as a Councilor.

Mr. McIntyre said that we have cosponsored the Mini-Estes Conference for the past two years. The Regional Medical Program has been the coordinator of these conferences. Attendance this year was about 100 less than the previous year. It has been suggested by the Missouri Hospital Association that this conference be discontinued at least for one year and, possibly, be resumed again the following year. Dr. Bowles, Chairman of the MSMA Commission on Public Affairs, concurs that this conference should definitely be postponed, if not completely discontinued. Mr. McIntyre asked for the Council's opinion in this regard. On motion, duly seconded, it was agreed that the Mini-Estes Conference should be discontinued for the present time.

REPORTS OF DISTRICT COUNCILORS

District #1—Dr. Martin indicated that Sisters' Hospital in St. Joseph is under reorganization and a Board has been formed to take over the operation of this hospital in November. The Board is made up of 21 lay people and two doctors. He indicated that there are many problems involved.

They are having their usual problems with CHP, but stated he felt physicians should definitely get involved in CHP activities so that they know what is going on and can help make policy and direct activities.

District #2—Dr. Bach reported that several new physicians have recently located in his area. He further stated that at his Councilor District meeting held in March, concern was expressed regarding PSRO.

District #4—Dr. Hetlage thanked the Council for implementing some of the suggestions of the fourth District and stated that, at this time, members in his district did not feel that they would make any further proposals.

District #5—Dr. Bregant stated that PSRO is the main concern in his district at the present time.

District #8—Dr. McAlhany indicated that Dr. Bonebrake's insurance committee is looking over life, overhead and major medical insurance and, hopefully, will be able to pursue this matter and make recommendations to the Council for the development of a statewide program. Both St. Louis Medical Society and Jackson County Medical Society have recently changed their programs. This insurance committee will continue its study.

Dr. Grebel spoke to the Greene County Medical Society regarding the Health Care Foundation and did a very commendable job.

Dr. McAlhany reported that in April, the Court of Appeals upheld the IRS tax decision in favor of the "Singing Doctors."

District #9—Dr. Cooper indicated that in his area, there are a few physicians who do not belong to any organization such as the local society, etc. They are trying to get these physicians involved in organized medicine. There are a number of concerns in his district regarding PSRO and still a few complaints about the manner in which Medicaid and Medicare handle their claims.

District #10—Dr. Hansbrough indicated that he recently spent a night at Crown Center Hotel in Kansas City where the MSMA 1974 Annual Meeting will be held and thought it was very nice.

District #3—Dr. Franklin said they had a ballot opinion of their membership regarding the building of new facilities to house both the St. Louis Medical Society and the St. Louis County Medical Society. About 50% of the membership returned their ballots and the vote was 57% to stay and 43% to move. For the St. Louis County Society, the vote was about 50% each way. Further meetings will be held in this regard.

Dr. Franklin stated that he had received a letter from Blue Shield regarding its Open Panel Program. Along with this letter of invitation to be a sponsor of the plan was literature which they plan to include in their selling program. Included in this selling material was the resolution from MSMA supporting the Open Panel Program. Dr. Franklin indicated that he did not feel this was truly an open panel program and read his letter of reply to Blue Shield.

Dr. Franklin stated that he received the new, revised Bylaws of the Health Care Foundation. He said that in Subsection 5, he interpreted one part as giving the Judicial Committee the authority to suspend or expel members in the MSMA or the MAOPS. Dr. Benoit stated that this was a misinterpretation; the HCF definitely has no control over membership in either organization and has no such intention. The wording of this will be changed to make the meaning clear.

The St. Louis Medical Society has produced a Handbook on Health Careers and also a Reference Book for Physicians.

Dr. Hetlage explained that the Blue Shield Open Panel Program was developed over a year and a half period of time with much physician input. He stated that he doubted that the MSMA resolution would be used in their advertising.

Dr. Franklin said he has discussed this open panel program with many St. Louis physicians, and it seemed that most OB's and Surgeons were for it and many GP's and internists were against it.

District #7—Dr. Chandler reported that Dr. Hoffman, President of the AMA, will attend an informal dinner meeting at the Plaza III in Kansas City on June 14. He invited those in the area to attend.

Dr. Chandler stated that a PSRO Study Committee has been formed in Jackson County and is made up of members of the Jackson County Medical Society Blue Shield, Hospital Association, HCF and Osteopathic Association.

The Chairman indicated that he had received many suggestions from the Council on how the Council Meetings should be conducted, etc. and asked the Council to think about having an informal session on Friday evening prior to the Council Meeting to go over some of the material so that the Saturday sessions could be more concise with less discussion.

Dr. Chandler also asked the Council to think about taking advantage of some of the programs offered by the AMA, such as a leadership conference for which the Council might select a small group of young, promising physicians in their respective areas, these people to be the captive audience. The AMA has experts in these fields. The only cost to the MSMA would be for the motel and the food.

Dr. Chandler said that another thing to think about is an MSMA Goals Committee patterned after the Battelle Report made for the AMA on goals of the future.

REPORT OF TOUR COMMITTEE

The Chairman then named the following Councilors to a Tour Committee to work with Royal Cooper on suggested upcoming tours to be sponsored by MSMA: Drs. Cooper, Martin and Bregant.

REPORT OF MSMA LEGAL COUNSEL

At the previous Council Meeting, Legal Counsel was asked for an opinion concerning the present status of the Ad Hoc Committee on the Negotiation of Professional Fees in view of the House of Delegates action on the Guild proposal.

Mr. Noble reported on this, giving background information regarding the Committee, the House action, etc. He stated that it would appear that the special Ad Hoc Committee ceased to exist upon its report of January 17, 1973 to the Commission on Medical Economics, Third Party Medicine and Governmental Relations.

Mr. Noble reported that the transcript in the Health Care Foundation Law Suit has been filed. This case will be set for hearing during the week of Jan. 7, 1974. After a case is set for hearing, the appellant's brief is due some 90 days before the date of hearing and the respondent has an additional 30 or 60 days to file a reply.

After brief discussion, motion was made, seconded and carried that the report of the Legal Counsel be accepted.

REPORT OF THE PRESIDENT

President Stricker made the following appointments of Councilor Advisors to the various Commissions: Commission on Public Affairs—Dr. Bradshaw; Commission on Continuing Education and Health Manpower—Dr. Hansbrough; Commission on Medical Economics—Dr. Hetlage; Commission on Medical-Legal Affairs—Dr. McAlhany; and Commission on Interspecialty Medicine—Dr. Cooper.

One of the resolutions adopted by the 1973 House of Delegates called for a Committee to Study Midwifery.

Dr. Stricker made the following appointments to that committee: Drs. William Griffin, Columbia, Chairman; Harry Jonas, Independence; Denis Cavanagh, St. Louis; Henry C. Willumsen, St. Joseph; and W. Alexander Hoja, Poplar Bluff.

Dr. Stricker indicated that he and Drs. Benoit, Cope, Richard Bradley and Mr. McIntyre attended a meeting called by the AMA in Washington. Thirty-six states were represented. This meeting was concerned with the appropriate areas for PSRO. The Missouri delegation was unable to obtain appointments with Senator Eagleton and Congressman Symington. However, they did have an opportunity to discuss certain matters with their Legislative Aides. Dr. Stricker indicated that Dr. Benoit would discuss this further.

Dr. Cope reported that he had had the pleasure of attending Alumni Day at Central Methodist College on April 28. Dr. William Bailey, a St. Louis ophthalmologist, and Dr. Robert Hodge, a Kansas City internist, were presented Distinguished Alumni Awards. Also receiving this Distinguished Alumni Award was Ray McIntyre. Dr. Cope extended his congratulations to Mr. McIntyre and read the following biographical information on his many accomplishments:

"Noted Executive Secretary of the Missouri State Medical Association and a veteran of more than 30 years in the health care field.

"Raymond R. McIntyre, class of 1932, was born in Holt County, Missouri. During his high school years, he was active in many school organizations and played on Oregon's state championship basketball team.

"During his years at Central, Mr. McIntyre was a four-year member of the 'C' Club, winning letters in both basketball and football. He played on Central's basketball conference championship teams all four years, was quarterback of the football team and captain of the basketball team. In addition he was a student body officer, member of the Aristotelian Literary Society, Theta Chi Delta, Delta Phi Alpha and a 'Campus Leader.'

"Mr. McIntyre returned to CMC in the spring of 1935 as assistant enrollment secretary to E. E. Rich, following three years of teaching in Montgomery City and Macon. He also was assistant basketball coach under C. A. Clingenpeel and received his master's degree in education from the University of Missouri during this time.

"He was principal and basketball coach at Fayette High School for two years, returning in 1941 to the University of Missouri as a doctoral candidate in education during the fall semester and assisting the enrollment secretary in the spring semester. He continued his interest in basketball, playing on semiprofessional and independent teams and officiating at high school games.

"In 1942, Mr. McIntyre joined the staff of the Missouri State Medical Association in the St. Louis offices. From 1944 to 1946, he served in the United States Naval Reserve, holding at his release the rank of Lieutenant and administrative assistant to the commanding officer of Barin Field, Pensacola, Fla.

"Returning to the State Medical Association as field secretary, he worked with doctor placement, county medical societies and the Missouri State Medical Foundation. He was instrumental in organizing the Missouri Health Council and served as its president. He also served as executive secretary for the Missouri Academy of General Practice.

"In 1965, Mr. McIntyre became executive secretary of the Missouri State Medical Association, and in 1966 directed the transference of the offices to Jefferson City, where he now lives.

"Mr. McIntyre has been awarded the Distinguished Service Award of the Missouri Academy of General Practice and was elected an associate member of the Southern Medical Association. He holds an affiliate membership in the American Medical Association and is a member of the American Association of Medical Society Executives.

"Mr. McIntyre was married in 1938 to the former Martha Donaldson, then a women's physical education instructor at CMC. They have two daughters and five grandchildren. Mr. McIntyre is a member of the Chamber of Commerce in Jefferson City, the Rotary Club and the United Methodist Church."

REMARKS OF DR. BENOIT RE: HCF AND PSRO

Dr. Benoit gave a brief account of what took place at the most recent Board Meeting of the Health Care Foundation. He stated that the MSMA has given the HCF endorsement as being the PSRO agency in Missouri and that a similar action was taken by the MAOPS. He said that this should be of help in their ongoing efforts.

He said that the Council had been circularized with a set of revised Bylaws for HCF. Sixteen were returned; 14 without comment. One of the comments was Dr. Franklin's in regard to Subsection 5, and the other was relative to the appointment of chairmen of local review committees. The Bylaws stated that the Central Coordinating Committee would have this responsibility, and the suggestion made was that each review committee should have the prerogative of electing its own chairman. These changes were made and the new Bylaws have gone into effect. Dr. Benoit indicated that the funding situation for HCF is in a critical state. The EMCRO grant was denied. RMP has been giving a nominal fee to HCF monthly, but it is felt this would terminate due to the RMP funding situation. Another solicitation letter is being sent out. However, we cannot determine as yet what the response will be.

He said that time had been spent with Dr. Domke in relation to the computer program in the Division of Health on hospital discharge summaries. The HCF has gone on record as being in favor of further study of this matter.

Another major item discussed by the Board was a draft of a concept for delivery of services for PSRO through the HCF. It is the intention of the Foundation to develop this so that if and when in dealings with Dr. Bauer there is discussion as to whether or not the HCF would qualify, this can be used.

Dr. Benoit gave background information regarding how the meeting in Washington on PSRO came about. Several of the larger states were concerned about the geographical distribution. They requested an informal confrontation with HEW. The AMA arranged this meeting and invited all the states. The AMA provided everyone who came to the meeting with a kit of information which capsulized what the facts were as they related to the development of local PSRO's. There were certain good reasons for having an umbrella PSRO. Dr. Benoit said that his reaction was that an overwhelming percentage of Senators and Congressmen who voted on this legislation had no real insight as to what they were voting on. There is nothing in the law that states the number of physicians, minimum or maximum, for a PSRO. It was the feeling that certain staff people with the U. S. Senate are making the decisions as to the intent of the law.

Most of the delegations at the Washington meeting

(Continued on page 620)

WASHINGTON

The HEW Department issued interim regulations to guide the new chronic kidney disease treatment benefit program which it estimated will cost $250 million in the first year and could arise to $1 billion a year in five years. The expansion of Medicare to cover costs of kidney dialysis and transplants for beneficiaries of all ages started July 1. Under interim rules, the number of facilities providing dialysis and transplants has been frozen at those now operating. The regulations also freeze reimbursement to a level of cost or charge representing an average of the charges during the previous year. Reimbursement for maintenance dialysis is limited to a "ceiling" set by the Department ($150 per dialysis) above which a justification would be required. All facilities must agree to the assignment method of reimbursement. Final regulations are due by the first of the year.

* * *

Sen. Wallace F. Bennett, ranking Republican on the Senate Finance Committee, won't run for reelection next year. The 74-year-old Republican from Utah has served four terms in the Senate. Replacing Bennett as top Republican on the powerful Finance Committee will be Sen. Carl Curtis (R.-Neb.). Bennett, one of the Senate's most influential conservatives, is author of the controversial Professional Standards Review Organization (PSRO) amendment to the Medicare-Medicaid bill of last year. He cited his age as a factor in his decision. "I can't deny the calendar." A few days earlier, Sen. Norris Cotton (R.-N. H.) had announced he will not run again.

* * *

President Nixon cited "a spirit of partnership" with Congress as he signed a one-year extension of major Public Health Service programs. The extension had been strongly opposed by the Administration which wanted to eliminate five of the 12 programs and cut others.

The Chief Executive declared that the bill strikes "a reasonable compromise with the Administration," noting that it keeps the programs alive for only one year instead of the customary three. In adopting the bill by overwhelming votes, Congress expressed an intention to review the programs to determine if it agreed with the Administration's policy decisions.

The 12 programs involved and the money authorizations for the fiscal year that started on July 1 are the following:

—Health services research and demonstration ($42.6 million); National health statistics ($14.5 million); Public health training ($23.3 million); Migrant health services ($26.7 million); Comprehensive health planning ($360.5 million); Medical libraries ($8.4 million); Hospital construction ($197.2 million); Allied health training ($44.3 million); Regional medical programs ($159 million); Family planning ($118 million); Community mental health centers ($234 million); Developmental disabilities ($41.7 million).

The Administration had urged Congress to eliminate or phase out the hospital construction or Hill-Burton program, public health training, allied health training, regional medical program (RMP) and community mental health centers.

In a statement released with the signing of the bill and two other measures, President Nixon said, "While the authorization levels are higher than I believe desirable, they will not damage our overall fiscal position if the Congress now follows my recommendations in the appropriations process.

"So long as the Congress follows a responsible course in the passage of future spending bills, I will cooperate in a spirit of partnership. But as we go forward, let there be no mistake about one fundamental point: if bills come to my desk which are irresponsible and would break open the federal budget, forcing more inflation upon the American people, I will veto them."

The RMP program has already been disbanded at HEW headquarters. Apparently, some sort of a makeshift arrangement will have to be set up to keep it operating for one more year anyway.

There was only one vote in Congress—by Rep. Philip Crane (R.-Ill.) in either house of Congress against the extension bill, which made unlikely any successful veto.

The chief Administration argument for closing down the five programs was that they were inefficient, had outlived their usefulness or could be handled more appropriately by the states.

* * *

The important national Professional Standards Review Council has been established with the appointment of 11 physicians. The Council will advise HEW Secretary Caspar Weinberger on the Professional Standards Review Organizations (PSRO) program to monitor the quality of medical care in Medicare and Medicaid.

"The contribution of this Council will be vital to the accomplishment of the objectives of the PSRO legislation, and we are indeed fortunate to be able to draw upon such a high caliber of expertise," Weinberger said.

Members of the council were selected from among 200 physicians of recognized standing and distinction in the appraisal of medical practice, who were nominated by national organizations representing practicing physicians and by consumer groups and other health care interests.

Those appointed to serve a three-year term on the council are Brown, Clement R., M.D., Director, Medical Education, Mercy Hospital and Medical Center, Chicago; Covell, Ruth M., M.D., Assistant to the Dean of School of Medicine, University of California at San Diego; Duval, Merlin K., M.D., Vice-President for Health Sciences, University of Arizona, former Assistant HEW Secretary for Health; Greene, Thomas J., M.D., Surgeon, Detroit; Haggerty, Robert J., M.D., Professor of Pediatrics, University of Rochester, N. Y. School of Medicine and Dentistry; Harrington, Donald C., M.D., obstetrician-gynecologist and medical director, San Joaquin Foundation for Medical Care, Stockton, Calif.; Hunter, Robert B., M.D., family physician, Sedro Woolley, Wash., member of the board of the AMA; Nelson, Alan R., M.D., internist, Salt Lake City, Utah, Alternate Delegate to AMA; Saloom, Raymond J., D.O., osteopathic physician, Harrisville, Penn.; Saward, Ernest W., M.D., Professor of Social Medicine, University of Rochester School of Medicine and Dentistry, Rochester, N. Y.; Scrivner, Willard C., M.D., obstetrician-gynecologist, Belleville, Ill., president of the Illinois State Medical Society and member of AMA Committee on Health Care of the Poor.

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Notes of interest from Here .... and There

Dr. H. Mitchell Perry, St. Louis, was elected president of the Missouri Heart Association at the 24th annual meeting held at Ramada Inn in Jefferson City on June 15. Other officers elected were **Dr. John D. Arnold** of Kansas City, president-elect; **Dr. Clifford R. Talbert** of Cape Girardeau, vice-president; **Dr. David Thomasson** of Springfield, secretary; and **Mr. David L. Babel** of Columbia, treasurer.

Dr. Irwin I. Rosenthal has been appointed director of the medical-surgical unit at St. Joseph State Hospital. A staff physician at the hospital for four years, Dr. Rosenthal previously was in practice in St. Joseph for approximately 30 years, except for a four-year period of military service.

Dr. Martin Ware, editor of the *British Medical Journal,* visited in the United States for two weeks recently in an effort to talk with general practitioners and learn more about medical procedures in this country. According to the *Kingdom Daily News,* he stated that his tour included visits in Columbia and Fulton because another British physician had visited the area previously on an exchange program and was impressed with facilities and services offered by area doctors. Dr. Ware held discussions with Dr. Sherwood Baker of the University of Missouri Medical Center in Columbia and with Dr. George Groce in Fulton. He also visited the Churchill Memorial in Fulton.

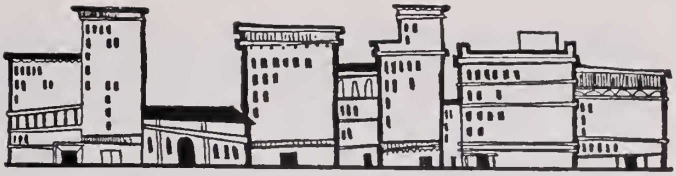
Dr. Starks J. Williams, Director of Medicine at Wayne Minor Health Center in Kansas City, has been selected as the state medical consultant for the Sickle Cell Anemia Program in Missouri. The state legislature appropriated funds for the Missouri Division of Health to implement the statewide program. Dr. Williams also is a member of the Sickle Cell Anemia Advisory Committee of Missouri, which is composed of informed persons from various parts of the state.

Dr. Theodore Fischer of Altenburg was honored with an open house in observance of his 40 years of medical service to the people of the area. On behalf of the City of Altenburg, Mayor Harry Seibel presented a plaque to Dr. Fischer commemorating the anniversary.

Dr. Hugh S. Brady, Concordia, was the guest of honor at a surprise dinner in June on the occasion of the 25th anniversary of his medical practice in the Concordia community. Hosts at the event were the members of the executive board of the Concordia Civic Club and their wives. He received a plaque of appreciation from **Mayor Curtis Ellis** of Concordia.

Dr. David S. Long, who has practiced medicine in Harrisonville for more than a half century, was honored in May by members of the Cass County Memorial Hospital Auxiliary. Dr. Long began his practice of medicine in Harrisonville in 1911. He is still active, although he limits his practice to office calls.

From the Medical Schools



UNIVERSITY OF MISSOURI-COLUMBIA

In recognition of his exceptional qualities as a scholar, surgeon and teacher, the Marion S. DeWeese Surgical Society has been founded by 24 former resident physicians who trained under Dr. DeWeese. Few people have received this kind of honor while still in active practice.

Chairman of the Department of Surgery at the University of Missouri-Columbia School of Medicine and Medical Center, Dr. DeWeese also holds the title of W. Alton Jones Distinguished Professor of Surgery. The academic chair was endowed by the family of the late chairman of the board of the Cities Service Petroleum Co.

The first formal meeting of the new surgical society will be held in Chicago in October during the annual meeting of the American College of Surgeons. The purpose of the group is to assist in surgical education and training, as well as to promote continuing fellowship among the members.

A multidisciplinary study underway at the University of Missouri-Columbia is the first systematic investigation of the relationship between a high meat diet and the incidence of bowel cancer in humans.

The year-long study, funded by a contract of $240,648 from the National Cancer Institute, will combine the expertise of UMC faculty from several fields. Dr. David Hentges, the principal investigator, is a professor of microbiology at the School of Medicine. Co-investigators and consultants include: Drs. Glenna C. Burton, C. Richard Dorn and Donald C. Blenden, microbiologists in the School of Veterinary Medicine; Bruce R. Maier, microbiologist; John M. Franz and Robert L. Wixom, biochemists, Daniel Winship, gastroenterologist, School of Medicine; Charles W. Gehrke and Klaus O. Gerhardt, chemists in the College of Agriculture; Margaret A. Flynn, nutritionist in the School of Home Economics and the School of Medicine; and Robert K. Tsutakawa, statistician in the College of Arts and Science.

Recent studies have attributed a high incidence of bowel cancer to the nature of the intestinal flora which synthesizes carcinogenic agents from food and intestinal secretions. The study hopes to provide an insight into the role intestinal bacteria play in converting food and intestinal secretions into active carcinogens.

WASHINGTON UNIVERSITY

James A. Wood, M.D., internist, succeeded James M. Stokes, M.D., surgeon, as president of the Washington University Medical Center Alumni Association on July 1.

Donald H. Finger, M.D., an internist, is president-elect, and George B. Rader, M.D., a surgeon, is vice-president of the 6,000-member organization. Secretary-treasurer Duane C. Hellam, M.D., is an assistant professor of medicine at the School of Medicine.

Dr. Wood also is an instructor in clinical medicine at the Medical School. Dr. Stokes is associate professor of clinical surgery; Dr. Finger, assistant professor of clinical medicine; and Dr. Rader, instructor in clinical surgery.

Washington University School of Medicine's Faculty Council has elected its first woman chairman. Jessie L. Ternberg, Ph.D., M.D., professor of surgery, succeeds John M. Kissane, M.D., professor of pathology, as presiding officer of the 350-member organization.

Richard D. Aach, M.D., associate professor of medicine, was elected vice-chairman.

Dr. Ternberg joined the medical faculty in 1959. She earned the Ph.D. degree from the University of Texas in 1950 and the M.D. degree from Washington University in 1953. In 1972, she was awarded an honorary Doctor of Science degree from Grinnell College, where she received her A.B. degree in 1946.

Washington University's Department of Ophthalmology has received $5,000 from Research to Prevent Blindness, Inc. (RPB). The RPB grant will be used to develop new techniques and advanced concepts in the saving of sight. Over the past 14 years, RPB has awarded $70,000 to the medical school.

ST. LOUIS UNIVERSITY

Dean Robert H. Felix led 120 new physicians in the recitation of the Hippocratic Oath at commencement exercises held on May 29 at Powell

(Continued on page 619)

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KAYE H. KILBURN, M.D. *and*
TRYGGVI ASMUNDSSON, M.D., *Columbia*

Farmer's Lung

Man's Oldest Occupational Illness

FARMER'S LUNG is an occupational disease probably as old as food storage and a settled agrarian civilization. In 1713, Ramazzini described a "Disease of Sifters and Measurers of Grain" in men who were exposed to the dust of crumbling, overheated cereal grain which had not been properly dried before storage. They developed cough, dyspnea and, later, cachexia that "heaped a thousand curses on their calling" and they rarely reached old age.[1] This disease did not receive much attention, however, until 1932 when Campbell gave a classical description of the symptoms in the acute stage in five farmers in Westmoreland, England. He noted that the summer of 1931 had been a bad season for haymaking because of rain and much of the hay eventually was taken in in an unsatisfactory condition.[2]

Farmer's lung has since been reported in Sweden, Norway, Belgium, Denmark, France, Switzerland, Eire, Iceland, Canada and the United States.[3] It is now recognized as a serious occupational hazard, especially in areas where storage of a large amount of hay and grain is needed for livestock feed. Wet summers, which make drying of the hay difficult, and severe winters which make necessary the construction of relatively airtight barns that favor a high and prolonged dust concentration, also may be important factors in the prevalence of disease. In 1965, farmer's lung became a compensable occupational disease in Great Britain.[4]

The prevalence of farmer's lung is unknown. In England and Wales, an annual incidence of 10.5 to 193.1 per 100,000 has been reported,[5] and the incidence has been found to vary with the summer rainfall totals.

The typical symptoms of acute farmer's lung appear four to eight hours after exposure to dust of moldy hay. They are dyspnea and cough usually accompanied by malaise, chills and fever and occasional blood spitting (hemoptysis). The usual physical findings are tachypnea and basilar rales, and cyanosis may be present in severe cases. Provided that further exposure is avoided, the acute symptoms usually subside spontaneously within seven to ten days, but the dyspnea may persist for several months.[3] The chest roentgenogram usually shows widely distributed, miliary-type infiltrations or a ground glass appearance which resolves within weeks or months of the attack.[6] However, the acute form may not be the most frequent manifestations of the disease. In two studies,[5,6] half of the patients gave a history of insidious onset of symptoms, which slowly progressed over weeks or months before they sought medical aid. Some of these milder cases resembled "asthmatic bronchitis."[5] Although the disease is initially reversible, recurrent or continuous exposure may

Progress in understanding the pathogenesis of farmer's lung has been made during the last decade. However, treatment of this disease is still unsatisfactory. The main hope for its control lies in prevention. A team of scientists at the University of Missouri is making a collaborative attack on this Missouri health program and seeks the cooperation of Missouri physicians and farm families. Dr. Kilburn is Director, Division of Pulmonary Disease at the University of Missouri School of Medicine, and Dr. Asmundsson is from Reykjavik Hospital, Iceland.

lead to pulmonary fibrosis and permanent disability.[7, 8]

Physiologic studies in acute cases have shown impairment of function. This decrease in pulmonary compliance, reduced diffusing capacity, non-uniform distribution of regional ventilation and blood flow and arterial hypoxemia[8–10] are characteristic. Airway obstruction is common in farmer's lung, but usually is absent in the acute stages.[10]

The pathological changes in the acute stage of farmer's lung consist of granulomatous, interstitial pneumonitis. The histology usually shows granulomatous reaction with round cell infiltrations, epitheloid cells and poorly defined tubercles with occasional giant cells. The giant cells, however, may be numerous in some sections. The bronchioles are frequently involved, resulting in obstructive bronchitis. Vasculitis is common. The alveolar septa are thickened and infiltrated by plasma cells and lymphocytes.[7, 9, 11–14] Intra-alveolar fluid and histiocytes containing vacuolated cytoplasm are found frequently[15] and may be a prominent pathological feature causing the filling of many alveolar spaces.[16] Much less is known about the pathology of the chronic stages. Noncharacteristic interstitial fibrosis and "emphysema," sometimes resulting in pulmonary hypertension and cor pulmonale, have been described.[7, 9, 14]

Progress has been made in understanding the pathogenesis of farmer's lung during the last decade. Pepys *et al* have found that serum from patients with farmer's lung contained precipitins against extracts of moldy hay.[17, 18] This was soon confirmed by others.[19, 20] Gregory and Lacey[21, 22] simultaneously demonstrated that hay which caused farmer's lung had evidently become heated spontaneously during maturation, that it had a higher pH than good hay and that its dust contained more thermophilic molds and actinomycete spores but not appreciably more herbage fragments. One of these actinomycetes was Thermopolyspora polyspora (Micropolyspora faeni). Pepys *et al*[6, 23] provided convincing evidence that extracts of T. polyspora obtained from cultures on ordinary media contained antigens similar to those found in moldy hay. Eighty-seven percent of sera from patients with farmer's lung reacted to T. polyspora compared to 89% reacting to extracts from moldy hay. However, 52% of sera from these patients also reacted to Micromonospora vulgaris, and, thus, the organisms appeared to have a common antigen.[6] However, precipitins against moldy hay were not diagnostic of farmer's lung as 17% of farmers without clinical signs of this disease had positive reactions.[6] These studies have been confirmed by others.[24–26] Thus, serological tests are helpful in diagnosing farmer's lung in spite of the occurrence of false positive and false negative tests. In absence of antigen challenge, such tests become negative in three to five years.[8, 10]

Further evidence for the etiology of farmer's lung has come from inhalation studies with extracts from moldy hay or T. polyspora cultures which cause similar reactions.[6, 27, 28] In susceptible individuals, a febrile illness with clinical and physiological features similar to farmer's lung occurs in four to six hours after inhalation of the antigen. However, the symptoms are similar and usually disappear within 24 hours with the small doses of antigens used. Therefore, in selected patients in whom suspicion is high but symptoms are atypical and serological tests were inconclusive, the use of inhalation tests to diagnose farmer's lung appears justifiable. Skin tests are of no value in the diagnosis of farmer's lung.[25]

The hypersensitivity reactions involved in farmer's lung is thought to be an Arthus type reaction.[11, 29, 30] Two patients with farmer's lung who were skin tested with T. polyspora antigen had a positive reaction in four hours. This was biopsied and found to be an Arthus reaction by light and immunofluorescent microscopy.[30] We are not aware of immunopathologic studies of lungs that confirm this concept. Animal models of hypersensitivity pneumonitis have been developed[31, 32] and ought to be helpful in solving this question.

Little is known about the prognosis of farmer's lung. The acute attacks may be fatal,[11] although this occurrence is rare. A few deaths have been reported due to the chronic stage of farmer's lung.[7, 14, 33] In the only study on the prognosis of farmer's lung by Barbee *et al*,[8] 50 patients with farmer's lung were followed for at least three years (average of six years). Five patients died of pulmonary causes during follow-up (10% mortality rate). However, there is no information on the duration of the disease in these patients and no autopsy findings to confirm that the deaths were due to farmer's lung.

The treatment of farmer's lung is unsatisfactory. Adrenal corticosteroids are said to be of help in treating the acutely ill patients,[8] but no studies have been done to prove this. Masks to filter the spores from the inhaled air are uncomfortable and have not been helpful. Attempts of desensitization have been futile because of serious reactions to the antigen.[34] Patients who have been successful in avoiding exposure to moldy hay have been able to continue farming, but others usually have had to change their occupation.[8] The main hope for control of this disease lies in prevention. Methods for drying and storing hay must be improved to prevent the growth of molds.

Resources of three medical centers have been organized in Wisconsin under a lung center sponsored by the National Heart and Lung Institute. Scientists from Medical College of Wisconsin in Milwaukee, Marshfield Clinic in Marshfield and University of Wisconsin have joined together to study the clinical, epidemiological physiological features and to relate these to mold exposure.

Several years ago, Dr. Milton Feather in the Department of Agricultural Chemistry at the University of Missouri-Columbia began isolating, characterizing and identifying fractions from Aspergillus; much progress has been made in separating these components.

A team of medical scientists, which came to the Columbia campus in June, is headed by one of us (KHK) and is working on a problem which is similar to farmer's lung in human and in cellular and animal models. A collaborative attack on one of Missouri's health programs is in the offing as Dr. Feather and his chemists are joined by our human biologists with their sights trained on the prevention of the distressing symptom of shortness of breath due to inhaled molds in Missouri farmers. The cooperation of Missouri physicians and farm families will be requested as the study of farmer's lung progresses this summer.

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Reprints: Kaye H. Kilburn, M.D.
Veterans Administration Hospital
Columbia, Mo. 65201

JEAN-RENÉ DUPONT, M.D., ***Sikeston***

Vascular Surgery in the Community Hospital

Results and Analysis of a Three-Year Experience

THE PAST SEVERAL YEARS have seen a gradual delineation of cardiac and peripherovascular surgery as two separate fields. The cardiac surgeon, who is generally a member of a multidisciplinary team, has remained in the medical center while the peripherovascular surgeon has attempted to break the bond with the medical center and, in some instances, has moved into the community hospital. In this respect, it has been pointed out that he has become more like the neurosurgeon who has been able to transfer his practice to the community hospitals while maintaining his standards of performance. Little information, however, is available on the success with which the vascular surgeon has effected this migration. Also, in a recent critical review,[1] vascular surgery in the community setting often was found to be lacking in quality and sufficient volume.

Dr. Edwin Wylie, in his presidential address to the Cardiovascular Society, pointed out that no uniform level of training existed for vascular surgeons.[2] In an effort to control the standards of practice for vascular surgeons, it has been suggested that centers of excellence be developed in which the standards of vascular surgery would be uniformly high. However, quite clearly, this would stifle the incentive of the vascular surgeon to return to community practice and would not result in an adequate output of capable vascular surgeons to meet the need of the general public. The interest in these problems is documented in the literature.[3, 4]

This detailed analysis of the development and quality of peripherovascular surgery in a rural community hospital indicates that results are similar to those published by various medical centers. It also justifies the conclusion that standards of excellence can be maintained by properly-trained surgeons under these circumstances. Dr. Dupont is from the Department of Surgery, Missouri Delta Community Hospital. This paper was originally presented in a summarized form at the meeting of the Missouri Chapter, American College of Surgeons on June 2, 1972.

The following is an analysis of the development and quality of peripherovascular surgery in a rural community hospital over a three-year period. The surgeons involved fulfilled the qualities of Dr. Wylie's Group I. They practice in a 180-bed hospital with modern roentgen facilities. A fully-staffed and equipped seven-bed intensive care unit was opened during the second year of this study.

RESULTS

In the fall of 1968, a program of vascular surgery was launched in Sikeston, a rural community of approximately 17,000 with hospital facilities adequate to support such a program. An arteriogram service was established in the hospital and patients with vascular disease were actively sought. This report of 182 cases deals with the first three years of this experience.

Prior to the establishment of a vascular service in this hospital, only an occasional arteriogram was performed. In 1969, 78 arteriograms were done; in 1970, there were 109; and in 1971, 162 arteriograms of all types were done in our hospital (Fig. 1). Currently, we average between 20 and 30 arteriograms a month, and we now have a radiologist who is actively interested in angiography.

a. *Femoral popliteal disease* (Table 1): Thirty-eight limbs were operated on in 34 patients with femoral popliteal disease. The average age of these patients was 70 years. There were 20 men and 14 women in the group. Operative mortality is defined as the mortality within 30 days of surgery. In this series, three patients died within 30 days of their surgery. There were two early occlusions and one superficial wound infection. Both patients with the early occlusions were reoperated on and the problems successfully corrected. Indications for surgery

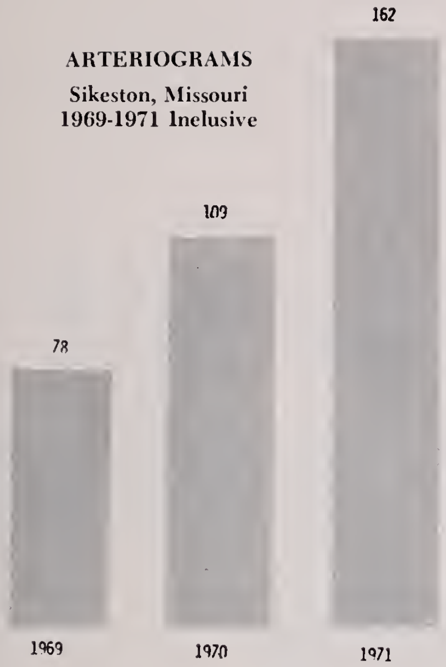

Fig. 1

TABLE 1

FEMORAL-POPLITEAL DISEASE

Number of Limbs Operated: 38 Number of Patients: 34
Average Age: 70 Males: 20 Females: 14
Operative Mortality (Inside 30 Days): 3 Patients

Indications for Surgery	
	Limbs
A. Severe claudication	10
B. Rest pain	14
C. Gangrene	14
	—
	38
Types of Operation	
A. Vein bypass	24
B. Dacron	8
C. Endarterectomy and patch graft on popliteal or profunda femoris arteries	6
D. Associated sympathectomy	21
Results	
	%
Major amputations	13
Long term patency	
Dacron	75
Vein	75
Clinically Occluded—Viable Limb	5

10 Patients Died Over 3 Years—7 With Patent Grafts

in this group of patients were severe claudication in ten patients, rest pain in 14 and frank gangrenous changes in 14. The type of operation performed was vein bypass in 24, Dacron bypass (all of them above the knee) in eight and endarterectomy and patch graft angioplasty on the popliteal and profunda femoris arteries in six. There was an associated sympathetomy in 21 extremities. The results of operations on the femoral popliteal area were as follows: 13% of the patients required major amputations in spite of revascularization; long term patency rate for the autogenous saphenous vein grafts was 75% and for the Dacron grafts above the knee, 75%. In 5% of the limbs, the graft is clinically occluded but the limb has remained viable.

It is noteworthy that ten patients have died over the past three years; seven of them had patent grafts.

b. *Extracranial cerebrovascular disease* (Table 2): Forty-seven revascularizations were performed in 23 men and 18 women averaging 70.3 years of age. Two patients died within 30 days of surgery. In three patients in the recovery room, transient hemi- or monoplegia was noted briefly with subsequent restoration of function. In three patients in the recovery room, there was transient systolic hypertension with blood pressure over 220 ml of mercury. Postoperative bleeding was encountered in one patient, but it did not require surgical intervention. The indications for operation on the extracranial internal carotid artery are well established and are the same as used by most vascular surgeons.[5] In 15 arteries, a patch graft angioplasty was performed. Twenty-five arteries were operated on with the use of an internal temporary shunt. In this group of patients, there were no deaths from cerebrovascular accidents in the past three years. There was one cerebrovascular accident on the operated side in a patient with a patent vessel by arteriography one week following surgery. One patient has had a minor cerebrovas-

TABLE 2

EXTRACRANIAL CEREBROVASCULAR DISEASE

Number of Revascularizations		47
Males	23	
Females	18	
Average Age (years)		70.3
Operative Mortality		2

Results

No deaths from cerebrovascular accidents.
1 cerebrovascular accident on operated side with patent vessel at 1 week.
1 cerebrovascular accident on operated side at 3 years.

TABLE 3

AORTO-ILIAC DISEASE

Number of Revascularizations	28
Males	21
Females	7
Average age (years)	61.4
Operative Mortality	2
Types of Operations	
Aorto-femoral bypass (Dacron)	9
Aorto-iliac bypass or endarterectomy	10
Resection iliac and graft replacement or local endarterectomy	7
Axillary femoral or femoral-femoral	2
Associated procedures	
Sympathectomy	9
Cholecystectomy	1
Renal revascularization	1

Results: All grafts patent at this time in survivors.

TABLE 4

EMBOLIC OCCLUSIONS

Number of revascularizations	24
Males	14
Females	7
Average age (years)	59
Operative mortality	4
Major amputations	2
Anatomic site	
Aorta	1
Femoral-popliteal	17
Brachial	5
Pulmonary	1
"Etiology"	
Proximal aneurysms	3
Acute myocardial infarction	5
Trauma	7
Diabetes and sepsis	3
Severe atherosclerosis	5

cular accident on the operated side three years later with subsequent near complete recovery of function.

c. *Aorto-iliac occlusive disease* (Table 3): Twenty-eight revascularizations were carried out in the aorto-iliac system in 21 men and seven women. The average age in this group of patients was 61.4 years. Two patients died within 30 days of the operation. The following complications were encountered: superficial wound infection, 1; acute myocardial infarction, 1. Nine aorto-bilateral-femoral Dacron bypass grafts were performed. Ten aorto-bilateral-iliac bypass grafts or iliac artery endarterectomies were done. In seven patients, the iliac artery was resected and replaced with a Dacron tube graft or local endarterectomy was accomplished. In two patients, axillary femoral or femoral-femoral bypass was the procedure used. At the present time, all grafts are patent in the survivors. In nine cases, an associated sympathectomy was performed. One patient also had renal artery revascularization at the time of the aorto-iliac surgery and in one patient, the gallbladder was removed.

d. *Abdominal aortic aneurysms:* Seventeen patients had abdominal aortic aneurysm; 15 men and two women were operated on during the period of time in question. The average age was 70 years for the whole group. For the ruptured abdominal aortic aneurysm, the average age was 76. Among the electively operated patients, one died postoperatively. The operative mortality for ruptured aneurysms was 50%. This figure included two patients who had sustained cardiac arrest prior to surgery. Congestive heart failure was encountered postoperatively in one patient. Pulmonary complications were encountered in three, and a transiently rising BUN was seen in four patients, all of whom had ruptured aneurysms. In eight patients, the aneurysm was ruptured, in three it was symptomatic, in three it was clotted and in three it was an incidental finding. Seven patients required a tube graft and ten a bifurcating graft.

e. *Embolic occlusions:* Twenty-four limbs were operated on for embolic occlusion in 14 men and seven women averaging 59.6 years of age. Four patients died within 30 days of surgery. Two limbs required major amputations. Table 4 shows the anatomic site and etiology of the embolic occlusions in this series.

f. *Peripheral aneurysms:* Eight aneurysms were encountered in the lower extremities of six male patients averaging 65 years of age. Two were located in the common femoral arteries and six were in the popliteal artery, two of which were traumatic. In four, the aneurysm was resected and replaced with a Dacron graft and replaced in four with autogenous saphenous vein. To date, all eight grafts are patent. There were no amputations in this group.

Table 5 shows a variety of miscellaneous vascular procedures carried out in our hospital during the three years of this study. Of the four patients with renal artery stenosis, two are currently taking no medication for hypertension, one is taking one, instead of three, drugs and is normotensive and the third is moderately hypertensive with one drug. All were severely hy-

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cystitis, a sense of pelvic pressure, dyspa
fever, polyuria, incontinence, decre
libido, nasal congestion, proctitis, pyur
darkened urine have occurred in patie
ceiving the drug. Patients receiving
may experience abdominal distress, n
vomiting or headache if alcoholic bev
are consumed. The taste of alcoholic
ages may also be modified. Flattening
T wave may be seen in ECG tracings.

Dosage and Administration: For T
moniasis. *In the female:* One 250-mg.
orally three times daily for ten days. C
may be repeated if required in especially
born cases; in such patients an interval
to six weeks between courses and total a
ferential leukocyte counts before, durin
after treatment are recommended. Vagi
serts of 500 mg. are available for use, p
larly in stubborn cases. *When the vagi*
serts are used, one 500-mg. insert is place

he vaginal vault each day for ten days and oral dosage is reduced to two 250-mg. tab- daily during the ten-day course of treat- it. Do not use the vaginal inserts as the sole n of therapy. *In the male:* Prescribe Flagyl when trichomonads are demonstrated in urogenital tract, one 250-mg. tablet two es daily for ten days. Flagyl should be taken oth partners over the same ten-day period n it is prescribed for the male in conjunc- with the treatment of his female partner.

Amebiasis. *Adults:* For acute intestinal biasis, 750 mg. orally three times daily 5 to 10 days. For amebic liver abscess, 500 50 mg. orally three times daily for 5 to 10 s. *Children:* 35 to 50 mg./kg. of body ght/24 hours, divided into three doses, ly for ten days.

sage forms: Oral tablets 250 mg.
Vaginal inserts 500 mg.

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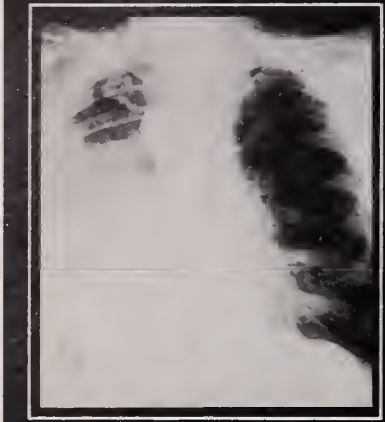

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TABLE 5

MISCELLANEOUS VASCULAR PROCEDURES

Superior mesenteric artery occlusion	3
Celiac artery stenosis	1
Brachial artery gunshot wound	3
Renal artery stenosis	4
Ileo-femoral venous thrombectomy	3
Inferior vena caval plication	3
Portocaval shunt	3

pertensive prior to surgery in spite of a combination of antihypertensive medications.

For venal caval plication, the Miles clip was used.

Discussion

The results reported in this study conform to a large extent to those reported for vascular surgery from established services in the medical centers.[1] Admittedly, the series is small and spans only a three-year period. However, a clear trend is discernible and it is reasonable to expect the five- and ten-year results to follow this pattern. The dismal, long-term survival of patients with femoral popliteal disease had been reported elsewhere.[6, 7]

Our series does not pretend to give support to the question of vein vs Dacron bypass for femoral popliteal disease. It is reasonably well established that autogenous saphenous vein is the material of choice for use below the knee. However, there also is no question but that when circumstances dictate, Dacron tube grafts may be used successfully in patients with a good distal runoff and in whom an anastomosis is done well above the knee. Our preference has been to attach the distal anastomosis to as normal a segment of popliteal artery as we can find. The proximal anastomosis is best made in the common femoral artery.[8, 9]

The operation on the extracranial internal carotid artery is a very satisfying one. The operative mortality usually is low (1% to 5%), and the results are good when the acute stroke is avoided.[10, 11] The two deaths in our series were both from acute myocardial infarctions in patients who lived more than five days postoperatively and who were otherwise doing well. Since we abandoned the use of hypercarbia during anesthesia, there has been very little tendency to transient hypertension in the recovery room. We use a shunt at times, depending upon the arteriographic findings and the backflow from the carotid artery at surgery. However, we prefer to operate without a shunt and do not always consider it necessary. Whether or not a shunt is used seems to influence the results in our hands very little, although I believe we tend to use the shunt in patients who have more extensive disease. We have not operated on the asymptomatic carotid bruit except in an occasional patient who was scheduled to undergo major intraabdominal vascular surgery or procedures in which hypotension might ensue. We use a patch only if we cannot close the arteriotomy without narrowing the lumen of the vessel.

The ruptured abdominal aortic aneurysm continues to be a fatal entity (35% to 65% operative mortality) and our results in this area are no different from anyone else's.[12] I believe that we frequently get the patient into our Emergency Room a little sooner than do surgeons practicing in the city or in the medical center. Especially in the last couple of years, there has been a tendency for us to see these cases soon after they had ruptured and, consequently, the results in this group of patients have improved from year to year. Almost all of the complications follow emergency surgery for ruptured abdominal aortic aneurysms rather than surgery for the electively treated lesion.

The mortality rate for patients with embolic occlusion of the lower extremities is high, and our mortality rate here is higher than elsewhere in the series. This is in keeping with the findings of Cranley.[13] The mortality rate and morbidity in this group of patients reflect the severity of the underlying disease.

It is interesting to note that the results in peripherovascular surgery in a hospital such as ours frequently are directly proportional to the education of the surrounding physician population. As the physicians in the area have become "tuned" to vascular disease, case material has been referred to us earlier in the course of illness. Specifically, the results in ruptured abdominal aortic aneurysms and in embolic occlusions of the lower extremities have improved during the third year of this study, when compared to the first two.

We believe that vascular surgery can be practiced with acceptable results in a rural community hospital and without compromising established standards of excellence. In many ways, the type of practice which develops under these circumstances may be more satisfying than it is in the referral center. Important factors are not merely hospital facilities or the experience of the vascular surgeon who performs these operations, but a great deal of success or failure in this practice rests on the readiness with which the illness is diagnosed and the promptness with which the patient is referred for corrective therapy by the primary physician. Physician education in the rural community, therefore, is of the utmost importance to the establishment and success of a vascular practice. The present size of this practice and the rapid growth of peripherovascular surgery in a relatively small community emphasizes the concept that most patients prefer to be treated at home when proper services are available. Furthermore, it would appear that the migration of adequately trained vascular surgeons away from the larger centers could be a successful one.

Care has been taken in this study to report all results, good and bad, without selectively eliminating any. We, therefore, feel that this is a critical and accurate appraisal of vascular surgery in this rural community.

SUMMARY

We have analyzed the results of 182 peripherovascular operations carried out over a three-year period in a rural community hospital. Our results are similar to those published from various centers and justify the conclusion that standards of excellence can be maintained by properly trained surgeons under these circumstances and that a case volume sufficient to maintain technical proficiency can be developed in rural practice. However, an all-important factor in the development of a vascular service away from established centers is education of the primary physician.

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G. W. SPECTOR, M.D., *St. Louis*

Joint Distention Arthrography

Alternate Method of Treatment of Osteoarthritis of the Hip

THE MEDICAL TREATMENT for chronic osteoarthritis in elderly patients, especially, is often disappointing. Physical therapy, oral medication, including steroids, and local injections in and around the joints often offer only transitory relief.

Recently, extensive operative procedures, which include fusion or total hip replacement, have been utilized to relieve the incapacitating pain accompanying this affliction.[1]

In the early 1960s, Dr. Lars Andren of the Malmo, Sweden, General Hospital began a project of arthrography of the hips for delineation of the normal and abnormal internal radiographic anatomy.[2] The procedure consisted of injecting several cubic centimeters of water-soluble contrast material through the joint capsule, thereby opacifying the joint space. This was carried out in normal, rheumatoid and osteoarthritic hips. He noted that certain patients experienced almost immediate relief from the symptoms of pain and improvement in the degree of limitation of motion after the joint capsule was distended. After observing a number of these individuals over a period of several months, he determined that a distinct therapeutic result could be effected by deliberately overdistending the joint capsule in selected patients, usually those with osteoarthritis.

He developed the following procedure. A metallic marker is placed over the groin area and a radiograph is exposed. From this localization film, a special needle with an obturator is manipulated into the joint space. The location of the needle between the capsule and the bone is verified by injecting several cubic centimeters of water-soluble contrast material, such as diatrizoate sodium (Hypaque). At this time, the capsule is overdistended with from 10 cc to 50 cc of saline solution. Sharp pain, which is often an intense reproduction of the patient's regular complaint, is usually experienced. The needle is withdrawn, leaving the joint distended. Immediately, the patient is asked to ambulate. Within 24 hours, it usually is apparent to what degree amelioration of symptoms was achieved. Most patients experience an immediate apparent improvement. Some return to their preinjection state within a matter of hours.

This article includes a report of the experience of the author in performing this therapeutic procedure on 76 patients with follow-up periods ranging to six years.

MATERIAL AND METHODS

After evaluation of the patient's history, present chief complaint and review of plain films, the subject is placed in a supine position. The inguinal region is shaved and prepared. A scout film with a metallic marker is obtained with a Polaroid camera (Fig. 1). Using sterile technique, cutaneous and subcutaneous infiltration with 1% procaine hydrochloride (Novocain) is carried out. A special shallow, beveled Cournand needle 2.5 cm in length is manipulated into the joint space in the inferior distal femoral neck region. At this point, the joint capsule reflects upwards onto the trochanteric ridge creating a more accessible potential space (Fig. 1). After injection of 3 cc to 5 cc of a water soluble contrast material such as Hypaque 60%, a Polaroid exposure is again made (Fig. 2). The anatomical characteristics of the joint space give

The author describes this therapeutic procedure and reports his experience with 76 patients with follow-up periods ranging to six years. He concludes that in selected patients with partially incapacitating osteoarthritis of the hip, improvement may be afforded by this inexpensive, relatively risk-free and simple procedure. Dr. Spector is from the Department of Radiology, The Jewish Hospital of St. Louis, and is an Instructor in Clinical Radiology, Washington University School of Medicine. This work was supported by The Harry Freund Memorial Foundation, St. Louis.

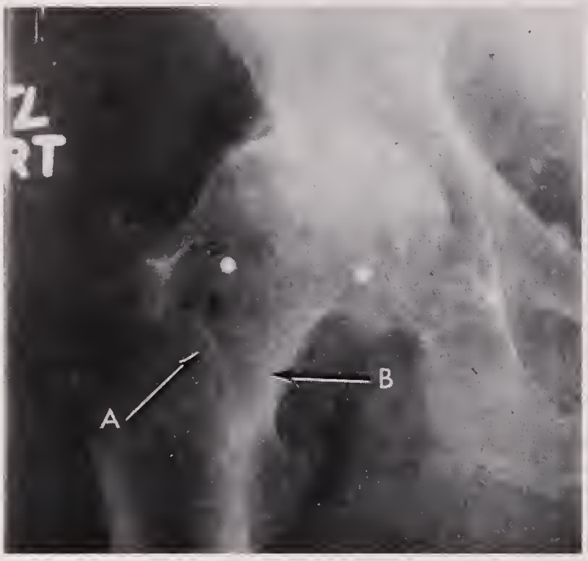

Fig. 1 Scout film with localization markers. (A) Reflection of capsule. (B) Potential space ideal for injection site.

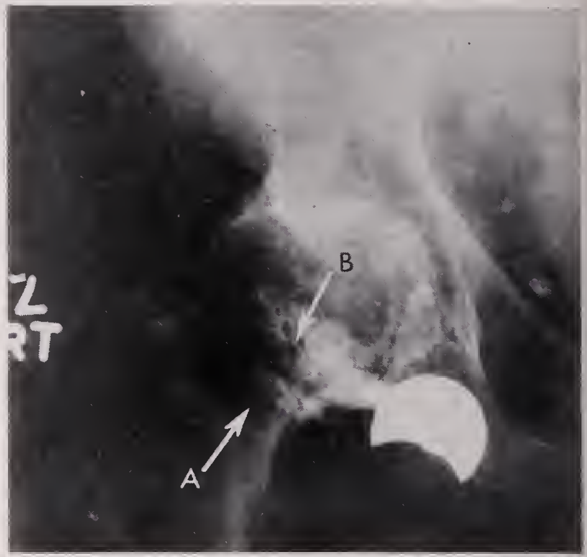

Fig. 2 Five cubic centimeters of contrast injected into joint space. (A) Incomplete filling. (B) Questionable synechia.

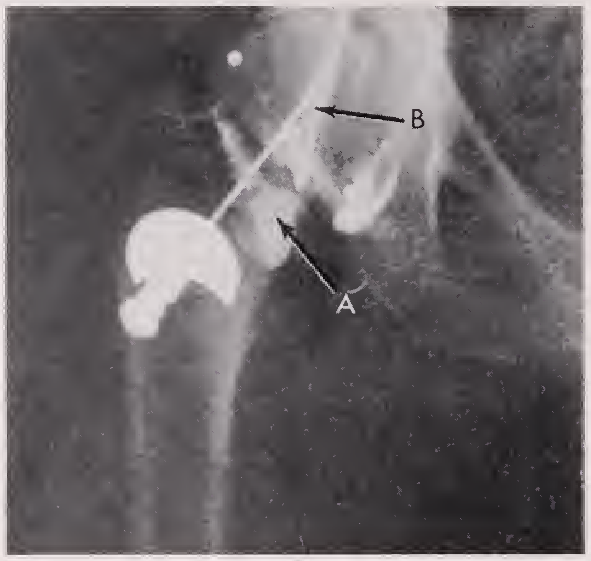

Fig. 3 Poor needle position. (A) Intracapsular contrast material. (B) Extracapsular contrast material.

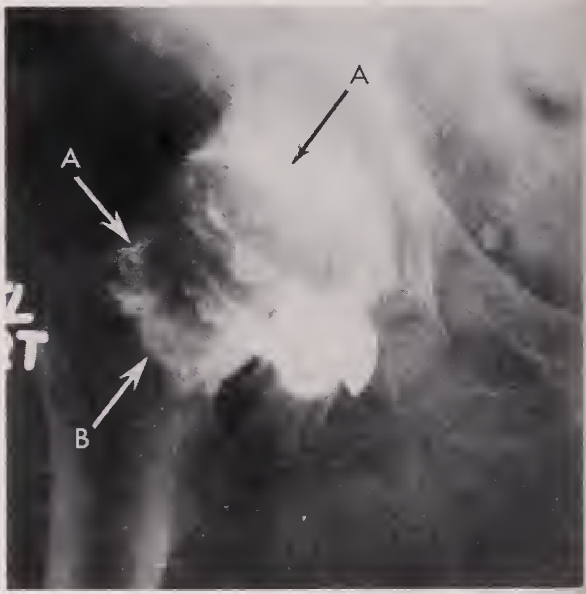

Fig. 4. Twenty cubic centimeters injected. Questionable lysis of adhesions (Fig. 2). (A) Further filling of capsule. (B) Reflection of irregular capsule.

a distinct radiographic pattern as opposed to an interstitial injection (Fig. 3). In addition to the film verification of the intracapsular portion of the needle, the hydraulic communication of the syringe in the joint space bounded by the slightly elastic capsule causes the plunger to be forced back after injection when hand pressure is removed.

Gradually, in increments of 5 cc to 10 cc, normal saline is injected into the joint with intermittent relief of pressure on the syringe. This causes alternating distention and decompression. A maximum of 50 cc of saline is injected, depending on the patient's tolerance of discomfort. Additional Polaroid exposures may be obtained to document the distention of the capsule (Fig. 4). Often, these later films show disappearance of linear radiolucencies which may be regarded as synechiae, although this is by no means definitely established (Figs. 2 & 4). The needle is removed at the moment of maximum distention. The patient is instructed and aided to walk immediately. Follow-up visits are requested at regular intervals.

TABLE 1

No. Results	*Mild*	*Good*	*Excellent*
18	10	32	25

At least three-months follow up. No follow up on seven patients.

TABLE 2

DURATION OF RESULTS

Up to 3 mos.	*3 mos. -1 yr.*	*1 yr.*
19	21	27

Results

There were 76 patients treated by this method during a six-year period. This included 45 men and 31 women. Their ages ranged from 47 years to 83 years.

In four patients, both hips were treated. Retreatment was performed on 12 patients at intervals from one week to six months. The patients were referred from internists, general surgeons, rheumatologists and orthopedic surgeons. At first, all patients referred were treated. However, it soon became apparent that no enduring results could be anticipated in those individuals with severe degenerative hip changes, including either marked overgrowth of the femoral capital, fragmentation and partial resorption of the femoral capital or virtually complete resorption of the articular cartilage. Recently, approximately one half of those patients referred were rejected because of the severe anatomical distortions mentioned.

Tables 1 and 2 indicate the result of the injections and the duration of the relief of symptoms. Unfortunately, it is difficult to objectively measure the subjective quality and intensity of pain. This may be indirectly accomplished, however, by evaluating the ability of patients to perform routine daily tasks. Simple maneuvers, such as bending down to pick up an object or putting on shoes and tying the laces and the pain experienced during these attempts are measures of function. The need for supportive aids in walking, the ability to walk and the pain experienced during the attempt to assume an upright stance from sitting or lying also may be used to evaluate hip disability. Twenty-four hours after treatment, the patient is well aware of any improvement in terms of these daily functions.

Recently, we have been using the Harris[3] method for hip evaluation. This is a relatively objective approach for grading pain and dysfunction before and after treatment. With the number 100 arbitrarily assigned to the normal hip, those patients below a score of 50 were rejected. The treated patients were in the 50 to 70 range. The post-treatment scores of these selected patients range from 80 to 93. However, follow-up information on these few patients is inadequate for definitive interpretation of the value of this method in pre- and post-treatment evaluation.

In general, it seems that those patients who have at least mild improvement after the injection tend to maintain improved hip function with diminished pain for up to a year. As a rule, they then begin to experience a gradual deterioration of the joint status.

Complications

Except for moderate soreness for 24 hours, no significant complications have been encountered. Strict sterile technique has prevented infection. No deterioration of hip function or increase in pain attributable to the injection was noted.

Discussion

It is certain that although objective and subjective improvement in hip function is brought about by this method, significant structural change on this weight-bearing joint is not achieved. In view of the altered radiographic appearance of the joint space before, during and after the distention, it is appealing to postulate a mechanical disruption of internal adhesions by the applied force. This is partially supported by the change in the radiographs during the examination which was previously mentioned and illustrated (Figs. 2 & 4).

However, there is no anatomical verification of this theory at this time. Another attractive explanation suggests that the severe overdistention of the capsule partially denervates the normally sensitive synovial tissue, thereby blocking afferent pain impulses. Again, there is no proof of this interpretation. No radiographic deterioration of hips in successfully treated patients was detected. It is unlikely, therefore, that localized "Charcot-like" joints were created. The proper cause of the improvement of the treated joints has yet to be elucidated. Nevertheless, it

(Continued on page 610)

GUIDO PODRECCA, M.D., ***Springfield***

Cytology Program in the Private Practice of Greene County and Surrounding Area

A Survey

During a 12-year period (1960-1971), 228,400 cervical pap smears were collected by private physicians in their own offices. A few were from the city clinic, a Cancer Society program and small community hospitals. The smears were examined in our private laboratory. The overall number of women screened is not known. About 50% of them resided in the city of Springfield, Mo., which had a population of 98,000 in 1960 and 120,000 in 1970. The remaining 50% lived in the surrounding towns and counties, which have an estimated population of 150,000.

This study differs from others as follows:

1. It represents the private practice of medicine, not that of large medical centers or city clinics. It does not represent socialized medicine. No grants or organized efforts were involved.

2. Repeat smears before biopsies were kept at a minimum, since the patients were paying their own bills. Biopsies were suggested to discover and treat cancer, but not to study its epidemiology. They were carried out if the attending physician considered them of benefit to his patients but not to comply with the rules of a program.

3. The physicians were personally acquainted and had direct contact with their patients, the pathologists and the cytoscreeners.

4. Most histologic diagnoses were issued by pathologists who had not been involved with the cytologic screening. Therefore, the biopsy results were not biased.

5. The correlation between smears and biopsies was not manipulated. That is to say, the tissue diagnoses were tabulated as issued, without excluding those about which there was diagnostic disagreement or those whose biopsies were not fully adequate.

6. Most women were of Caucasian extraction, the nonwhite population in this area being very small.

7. The study was carried out without the help of a computer or the wisdom of a statistician. Personal time and finances were used, which greatly limited the data collecting possibilities.

During the 12 years, 617 malignancies and 187 dysplasias were found. Since the follow-up known to us was about 53%, we may presume that almost twice as many women had a pathologic condition. Table 1 shows the overall picture. The number of women screened not being

TABLE 1

Year	*Total Number Smears*	*Number Positive Smears*	*Percent Positive Smears*	*Percent Follow Up*	*Dysplasia Per 1,000 Smears*	*In Situ Per 1,000 Smears*	*Invasive Per 1,000 Smears*	*Adeno Ca Per 1,000 Smears*
1960	2400	53	2.20	64	1.9	5.2	7.1	0.0
1961	4800	122	2.54	28	3.0	10.8	1.5	0.7
1962	9000	125	1.38	75	2.9	6.2	3.2	0.1
1963	12200	137	1.12	74	2.2	5.7	2.2	0.6
1964	14500	131	0.90	69	1.4	5.7	1.9	0.0
1965	18100	182	1.00	37	1.8	5.5	1.8	0.6
1966	21800	191	0.87	19	2.0	3.0	2.5	0.7
1967	23800	169	0.71	33	1.1	3.4	1.2	0.4
1968	26400	156	0.59	35	0.6	3.6	1.3	0.2
1969	28900	102	0.35	57	0.4	2.2	0.8	0.1
1970	31400	306	0.97	65	2.5	4.7	0.7	0.3
1971	35100	208	0.59	57	2.2	4.0	0.9	0.3
Total	228400	1882	0.82	53.7	1.66	4.25	1.36	0.28

During a 12-year period, 228,400 cervical pap smears were collected in the private offices of the physicians of Greene County and surrounding area and were screened. Even though the number of women involved was not known and the statistical analysis had to be related to the number of smears, the data obtained are similar to those in recent published results of surveys in which the number of women screened was known. Dr. Podrecca is in the private practice of pathology.

known, the incidence per thousand had to be related to the number of smears. A steady decline of positive smears, dysplasias and malignancies occurred through the year 1969. In 1970, there was a sharp increase, which only moderately diminished in 1971. It is believed that such increase was due to a larger than usual number of newly screened women and to the somewhat less strict criteria that are now applied to the diagnoses of dysplasia and in situ carcinoma.[1–5] It is to be noted that there was no increase in the incidence of invasive squamous cell carcinoma and adenocarcinoma. (A survey of the 1972 pap smears up to November 1 shows an incidence of positive smears of 0.59%.)

Table 2 correlates the positive pap smears to the biopsy diagnoses. It shows more biopsies than were performed in reality because it is based on the number of positive smears rather than on the number of biopsies, and some patients had more than one smear before surgery was carried out. For instance, if one patient had two smears, each of which was positive, and a single biopsy reported malignant tissue, this is recorded as two positive smears and two positive biopsies, meaning two positive smears with a positive biopsy.

The actual figures are as follows:

Smears	*Biopsies*
687 positive smears	617 malignancies
194 positive smears	187 dysplasias
130 positive smears	116 negative biopsies

We do not have data about false negative smears which, according to the information available, were negligible. Of the five Class V with negative biopsies, three were from two pregnant women. Even in retrospect, we were not sure we could differentiate malignant cells from trophoblastic cells. The attending physicians had been personally contacted and warned about the possibility of trophoblastic cells. (A few cases of in situ and invasive carcinoma of the cervix during pregnancy also were found. One pregnant patient with two Class V smears had a Class I smear about two months after delivery. Two years later, she had a Class III pap smear; after three months, she had a Class IV pap smear. She was referred to Ellis Fischel State Cancer Hospital. It is not known at this time if a biopsy has been carried out.) No further follow up is available in the other two negative Class V. We have seen several cases of positive pap smears, which needed more than one biopsy before the malignancy was finally discovered at times, in the vagina or vulva.

TABLE 2

HISTOLOGIC DIAGNOSES OF
1,011 POSITIVE SMEARS

Negative	*Dysplasia*	*In Situ*	*Invasive*	*Adeno Ca*
130	194	495	159	33
(12.8%)	(19.2%)	(48.9%)	(15.7%)	(3.2%)

Negative	*Dypslasia*	*In Situ*	*Invasive & Adeno Ca*
CLASS III 633 (62.6%)			
103	153	301	76
(16.2%)	(24.1%)	(47.5%)	(12.0%)
CLASS IV 300 (29.6%)			
22	40	165	73
(7.3%)	(13.3%)	(55.0%)	(24.3%)
CLASS V 78 (7.7%)			
5	1	29	43
(6.4%)	(1.3%)	(37.1%)	(55.1%)

Table 3 shows the changes in the pattern of the screening program which occurred between the first and the last years of the period. The total number of smears not only increased, but the emphasis shifted from the middle to the young and elderly ages. By comparing the number of malignancies discovered in 1960 to those discovered in 1971, one can appreciate that the changes, indeed, were fruitful. (The total number of smears is slightly less than given elsewhere, since in a few cases the age of the women was not known.)

Table 4 shows the number of pathologic conditions found in the various age groups. (We recently have had a positive smear with carcinoma in situ of the cervix in a 16-year-old girl at conization.) The youngest patients were two 19-year-olds with in situ carcinoma; one 25-year-old with invasive squamous cell carcinoma; one 25-year-old with adenocarcinoma of the endocervix.

Although our analysis has been based on the number of pap smears rather than on the number

TABLE 3

Year 1960				*Year 1971*		
No. of Smears	*% of Total*	*No. of Malign.*	*Age Group*	*No. of Smears*	*% of Total*	*No. of Malign.*
10	0.41	0	under 20	2250	6.43	3
58	2.42	0	21-25	5100	14.59	10
192	8.03	0	26-30	4450	12.73	17
389	16.26	4	31-35	3600	10.30	20
408	17.06	3	36-40	3400	9.72	20
470	19.65	3	41-45	3000	8.58	13
336	14.05	3	46-50	3050	8.72	10
360	15.05	3	51-60	4800	13.73	9
168	7.02	3	over 60	5300	15.16	16

TABLE 4

Age Group	*Dysplasia*	*In Situ*	*Invasive*	*Adeno Ca*
Under 20	2	4	0	0
21-25	32	61	1	1
26-30	18	80	1	2
31-35	32	93	15	3
36-40	29	73	18	2
41-45	20	56	14	3
46-50	20	45	21	2
51-60	20	41	30	4
Over 60	18	30	53	16
Unknown	3	12	6	0

of the screened population, the data derived are similar to those of publications in which the number of women involved was known.[5-8] Our tables show the peak incidence of carcinoma in situ to be in the 31-35 year group and that of invasive squamous cell carcinoma in the group over 61 years. This differs from the older statistics, which placed the peak incidence of in situ carcinoma at about 40 to 45 years and that of invasive carcinoma at about ten years later. It is similar, however, to those of more recent studies.[5-8] Perhaps, the reason is that, in the past, fewer smears were obtained in the younger and older ages. In our study, we could not find the minor, secondary peak of incidence of carcinoma in situ that others have described as occurring in the 50 to 60-year group.[6, 7]

By involving an ever increasing number of women, we hope that the screening program will show the gradual disappearance of invasive squamous cell carcinoma of the uterine cervix.

Acknowledgement: The author wishes to express appreciation to the attending physicians who collaborated by furnishing the requested data on their patients.

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Reprints: *Guido Podrecca, M.D.*
207 Professional Bldg.
Springfield, Mo. 65806

Joint Distention Arthrography

(Continued from page 607)

can be stated that in selected patients with partially incapacitating osteoarthritis of the hip, objective as well as subjective improvement may be afforded by this inexpensive, relatively risk free, simple procedure.

In those patients in whom medical management fails or who are incapacitated sufficiently to preclude major surgery and for those individuals unwilling to undergo operative correction, this therapeutic approach may offer at least temporary partial relief.

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Reprints: *G. W. Spector, M.D.*
The Jewish Hospital
216 S. Kingshighway
St. Louis, Mo. 63110

MSMA NEWS ROUND-UP

August, 1973

'Examiner system' needs M.D. leaders

Missouri communities have the opportunity to pdate and upgrade the anachronistic coroner sys- m under provisions of a law passed by the 1973 eneral Assembly

Supported by the Missouri State Medical Asso- ation, Senate Bill 122, which was recently signed y the Governor, establishes a "medical examiner ystem" in two Missouri counties and includes the echanism that would allow other counties in the ate to adopt the new system.

"It is hoped that our local Medical Societies ill lead the drive for implementing the medical xaminer system in their communities," stated ohn I. Matthews, M.D., chairman of the MSMA egislative Committee. "The provisions of this w, if pursued by physicians in each county, can ad to the replacement of the outdated coroner ystem by a modern medical examiner system, a uch needed change in our governmental setup."

Effective Sept. 28, the coroner's office in Greene nd Clay Counties will be replaced by a county edical examiner. The examiner MUST be a phy- cian.

Although the law applies only to these two counties at this time, provisions in the measure allow other counties in the state (either singly or jointly) and St. Louis City to adopt the medical examiner system by a majority vote of the electorate.

County Medical Societies are urged to contact County Court judges concerning the advantages of setting up the medical examiner system. The County Court can place the issue on the ballot.

Physicians are reminded that if the County Court believes an individual county is too small for a medical examiner, the law provides that two or more counties may combine efforts to obtain an examiner for the multi-county region.

The law gives medical examiners increased responsibilities in determining the cause of deaths which occur under violent or suspicious circumstances. It has been hailed by many as a step forward in modern law enforcement.

Physicians interested in leading the way for the establishment of a medical examiner system in their area should contact the MSMA Headquarters for further information.

Arthur W. Neilson, M.D., AMA Delegate, dies at age 66

Arthur W. Neilson, M.D.

Arthur W. Neilson, .D., 66, died July 8 at eaconess Hospital. One f Missouri's four dele- ates to the American Me- ical Association, Dr. eilson was a member of e AMA's Council on En- ironmental, Occupational nd Public Health. He was nown throughout Missouri s a conservationist and vironmentalist.

Dr. Neilson served as President of the St. Louis edical Society in 1958 and President of the staff of eaconess Hospital. He was a member of the Board f Trustees of Deaconess Hospital and served on the taff of St. Lukes and St. Johns Mercy Hospital. He as instrumental in the development of an affiliation etween the University of Missouri Medical School

Continued on next page

Smallpox removed from list of mandatory vaccinations

A bill passed by the 1973 General Assembly and signed into law by Gov. Christopher Bond removes smallpox from the list of mandatory immunizations required for public school pupils in Missouri.

Physicians, of course, retain the option to vaccinate for smallpox, but it is no longer **required.**

Certain procedural precautions should be undertaken when administering smallpox vaccinations.

1. Physicians should obtain **informed consent** *from those who desire vaccination or those who the physician decides should be vaccinated.*

2. All physicians should be alert to the contraindications of smallpox vaccinations for infants up to one year old and infants, children and adults who have eczema, allergies or other dermatoses and children and adults with open wounds.

Eight anorectic drugs placed on Controlled Substance list

Eight anorectic drugs have recently been placed under regulations of federal and state Controlled Substances Acts according to final orders published in the Federal Register.

Placed in Schedule III of the Controlled Substance Act are:

* Benzphetamine—Marketed under the name of Didrex by Upjohn Company.

* Clortermine—New drug soon to be marketed under the name of Voranil by USV Pharmaceutical Corporation.

* Clorphentermine—Marketed under the name of Pre-Sate by Warner-Chilcott Laboratories.

* Mazindol—New drug to be marketed under the name of Sanorex by Sandoz Pharmaceutical.

* Phendimetrazine—Marketed under a variety of names by at least 20 companies, including Plegine by Ayerst Laboratories.

Anorectic drugs added to Schedule IV of the Controlled Substance Act are:

* Fenfluramine—New drug marketed under the name of Pondamin by A. B. Robins Company.

* Diethylpropion—Marketed under the name of Tepanil by Riker and as Tenuate by Merrill-National.

* Phentermine—Marketed under the name of Ionamin by Pennwalt.

In order to prescribe or dispense the above medications, physicians must be registered with the Federal Drug Enforcement Administration and the Missouri Division of Health. Also, effective Sept. 1, 1973, these drugs must be stored in accordance with Controlled Substances Regulations and all registrants required to keep records must take an inventory of stocks on hand on that date.

Prescriptions for these drugs must comply with the controlled prescriptions requirements: Name and address of patient; signature of prescriber (unless phoned in); prescriber's BNDD number and address; prescription dated on day prescribed.

Any prescriptions for these products issued before March 1, 1973, or prescriptions which have been refilled more than five times, may not be refilled after Sept. 1, 1973.

Dr. Neilson

CONTINUED

at Columbia and the Deaconess Hospital Residency program. He served as chairman of public relations for the St. Louis Medical Society for 25 years.

A dermatologist, Dr. Neilson attended Washington University, Ohio Wesleyan University and St. Louis University Medical School. He was an honorary member of the Missouri University Medical School Alumni Association, an honor member of the St. Louis Medical Society and a life member of the Southern Medical Association.

His father was the well-known internist Dr. Charles Hugh Neilson. He is survived by wife, Janet; five sons, Arthur W. Neilson, Jr., M.D., of Honolulu, Hawaii; Robert Neilson, Naval Air Station, Brunswick, Maine; Hugh Neilson, Dennie Neilson, and William Neilson, all of St. Louis; a daughter, Mrs. Janet Wells and a sister, Mrs. Reka Fisher, both of St. Louis.

Feds 'do their thing' with fee sign rules!

Physicians who express the belief that more government controls over medicine will result in even more confusion are probably smiling broadly over the administration of the regulation that doctors post fee schedule signs in their offices.

Under Phase 1, no fee signs were required. However, when Phase 2 came along, up went the signs. Then Phase 3 arrived and the signs could be taken down again.

Earlier this summer Phase 3½ went into effect and, of course, fee signs were again required to be posted — however, the signs had to be worded differently and had to be larger than the original Phase 2 signs.

Now Phase 4 is here!

You guessed it — the Cost of Living Council says that fee signs are **not required** *to be posted under Phase 4 guidelines.*

Physicians again regulated by Phase 3 price controls

Physicians and the rest of the health servic industry now are again operating, temporaril under Phase 3 mandatory price controls.

The Administration's July 19 order call for development of revised rules by the Healt Industry Advisory Committee, but at presen physicians are limited to a 2.5% annual fee i crease, provided it does not raise the profi margin.

Institutions can raise prices 2.5% withou notifying IRS, but must report charge increase between 2.5% and 6%; increases above 6% mus be approved by the Cost of Living Council.

The AMA and MSMA protested early thi year to President Nixon and the Cost of Livin Council that the Phase 3 controls discriminat against physicians.

The Administration's recent order was e fective retroactively to July 1 for the purpos of determining price increases under cost r imbursement contracts.

The Health Industry Advisory Committe was directed to develop detailed recommend tions to the Cost of Living Council "so th revised controls for hospitals and nursin homes can become effective no later than Oc 1."

The Cost of Living Council said it also wi consider revisions in the controls for phys cians, dentists, and other non-institutional car

Smallpox Law Changed

Gov. Christopher Bond signs a bill removing smallpox from the list of mandatory mmunizations required for public school pupils. Looking on are (left to right) Rep. es Langsford, Springfield; Lee H. Vensel, M.D., Springfield; Rep. Harold F. Reisch, olumbia; and Rep. Bill J. Crigler, Fayette. The three Representatives co-sponored the bill. Dr. Vensel appeared in behalf of the bill during hearings.

MSMA President protests standards for chiropractors

Proposed standards and regulations involving the inclusion of chiropractic services under Medicare were protested in a letter by MSMA President E. A. tricker to the U.S. Department of Health, Educaion and Welfare.

In the letter, Dr. Stricker said that although ublic Law 92-603 requires HEW to set "uniform ninimum standards" for chiropractors who would ractice under Medicare, the proposed regulations s published in the *Federal Register* are "insuficient standards."

Dr. Stricker also pointed out the sad irony in L 92-603. One section of the law demands the stablishment of PSROs to insure the highest deree of medicare care by M.D.s and D.O.s, while he section which includes chiropractors contains inimal requirements which can only serve to diinish the high quality of care for patients.

Specifically, the letter challenged the standard hich states a chiropractor is eligible under new edicare guidelines if he has been graduated from college of chiropractic. Dr. Stricker noted that one of the "colleges" are accredited and that the .S. Office of Education recently again denied acreditation because the applicants failed to comply ith a number of standards. "Is it a 'minimum tandard' or 'non-standard' to require graduation rom such a college?," Dr. Stricker asked.

The letter also stated that qualified physicians must determine if an X-ray taken by a chiropractor emonstrates a subluxation of the spine before payment can be made.

Seminars on health insurance planned for office personnel

The most effective way to file insurance claims and the problems experienced with commercial insurance companies will be the main topics at the fourth annual Seminar on Health Insurance Problems.

Sponsored by the Missouri Hospital Association and the Health Insurance Council, the Seminar is open to physicians' office personnel who are involved in insurance claim work.

For easy access, five meetings will be held in various cities. The $6 registration fee covers a coffee break and lunch.

The meetings will be held:

Sept. 27 — Ramada Inn East, Kansas City
Oct. 4 — Holiday Inn, Springfield
Oct. 11 — Ramada Inn, Jefferson City
Oct. 17 — Sheraton Inn, St. Louis
Oct. 18 — Holiday Inn, Cape Girardeau

To enroll office personnel in the seminar, fill out the following information form and mail it to the Missouri Hospital Association, P.O. Box 1044, Jefferson City, Mo. 65101. Additional information will be furnished by the MHA.

Please send registration information for the

Seminar on Health Insurance Problems

Name ____________________

Address ____________________

City ____________________ State __________

AMA acts on PSRO'S, FDA rules

The AMA House of Delegates — confronted with the largest business agenda in the Association's history — acted on a wide range of issues during the 122nd Annual Convention in New York.

Delegates selected Malcom C. Todd, M.D., California, as President-Elect. Others elected or re-elected were E. Bryce Robinson, M.D., Alabama, Vice President; Tom E. Nesbitt, M.D., Tennessee. Speaker of the House; William Y. Rial, M.D., Pennsylvania, Vice Speaker; and John H. Budd, M.D., Ohio, Richard E. Palmer, M.D., Virginia, James H. Sammons, M.D., Texas, and Kenneth C. Sawyer, M.D., Colorado, Trustees.

A brief summary of House action follows:

Physicians and the Government

PSRO's: House passed three Resolutions which (1) stated that only review organizations made up of practicing physicians can provide proper review: (2) requested that rules be written so existing successful review organizations be continued rather than implementing costly new agencies; (3) recognized that repeal or modification of PSRO legislation ultimately may be required to insure high quality of patient care.

Wage-Price Controls: Resolved that the AMA continue to work by all lawful means to assure non-discriminatory treatment for physicians under Economic Stabilization Programs.

FDA Drug Regulations: Directed AMA to (1) protest current and proposed FDA regulatory activities which restrict use of prescription drug to "official labelling;" (2) study possibility of proposing modivications to Food, Drug and Cosmetic Act; (3) work closely with FDA to develop effective methods for evaluating durgs used primarily to alleviate subjective symptoms, or drugs for which controlled clinical studies seem inappropriate; (4) develop system of communicating views of practicing physician when action is proposed which may remove frequently prescribed drug from market.

Physicians, Hospitals, Medical Schools

Institutional Licensure: House called for AMA to oppose extension of institutional licensure in lieu of individual professional licensure to physicians and nurses.

Quality Assurance Program: Adopted report stating reservations about QAP (peer review of hospital care and utilization) and recommended AMA offer suggestions to American Hospital Association. Recommended testing QAP in limited number of hospitals. Did NOT endorse QAP.

Support for Medical Staffs: Opposed changes in medical staff bylaws by hospital boards which usurp perrogatives of medical staffs.

Family Medicine: Emphasized need to increase opportunities for medical students to obtain exposure to family medicine.

Physician Distribution by Specialty: Declared (1) AMA should adopt immediately, publicize widely and promote a goal to have at least 50% of all medical graduates enter resident training in primary care specialties in coming years; (2) need for numbers and type of physicians should be monitored regularly with report to House.

Physicians and the Public

Emergency Telephone Number: Directs AMA to support current efforts to set up #911 as nationwide emergency telephone number.

Temporary Licensure in Medically-Deprived Areas: Encouraged state medical societies to support laws to permit out-of-state physicians to practice temporarily in areas of medical need.

Internal Matters

Unions: Reaffirmed tradition of the medical profession of not withholding services and opposed unionism among self-employed physicians. Recommended AMA assist physicians in employment situations.

Intern-Residents: Approved by-law change to seat resident-intern member on Council on Medical Service and Council on Medical Education.

Membership-Dues: (1) Delinquency date for remittance of AMA dues changed from June 1 to April 30; (2) requirement that members who have been dropped for non-payment of dues must pay one year's past dues is eliminated.;

Abortions: Reaffirmed AMA policy; "Abortion is a medical procedure and should be performed only by a duly licensed physician and surgeon in accredited hospitals acting only after consultation with two other physicians, and in conformance with standards of good medical practice and the Medical Practice of his state. Neither physician, hospital, nor hospital personnel shall be required to perform any act violative of good medical judgement or personally held moral principles."

Missouri Notes

Hector W. Benoit, Jr., M.D., of Kansas City, a Past President of the Missouri State Medical Association and a Missouri delegate to the AMA since 1968, was re-elected to the AMA Council on Medical Service.

Dr. Benoit was first elected to the Council in 1972 to complete an unexpired term. Dr. Benoit also serves on the AMA Advisory Committee on PSRO.

John W. Fries, M.D., of St. Louis, was one of four M.D.s to win a Master Award in the American Physician Art Association exhibit at New York. To qualify for a Master Award, the physician-artist won first place in previous exhibits.

A substitute Resolution for Resolution 8, introduced by the Missouri Delegation, was adopted by the AMA House. The Substitute resolves; "That the Officers and Board of Trustees of the AMA take steps to increase the capacity of the AMA to speak with authority in representing the medical profession and the public in the socioeconomic areas."

Loren Washburn, M.D., of Versailles, Missouri Delegate to AMA, served on Reference Committee C—Medical Education, which considered 12 Reports and 17 Resolutions.

President's Message

Now that the dust has settled over the 122nd American Medical Association's convention in New York City, we find that about 9,000 physicians and an equal number of guests and paramedical members attended the scientific exhibits and meetings.

The AMA House of Delegates took action on the largest volume of business in its history. In a significant move to open the door to house staff in organized medicine, the House of Delegates voted to give intern-residents representation on two councils that play major roles in the lives of young physicians. They were given seats on the Council on Medical Education and the Council on Medical Services. An intern-resident member was seated last year on the Council on Long Range Planning and Development.

E. A. Stricker, M.D.

Another subject which was much "cussed and discussed" was PSRO. While many resolutions to repeal or modify the PSRO law sparked energetic discussion in reference committee hearings and in debate on the floor, delegates finally agreed that the AMA should continue its major role in implementing the PSRO law.

At our opening meeting of state presidents, Dr. William I. Bauer gave the latest status of PSRO. He told us that by mid-July, the state medical organizations will receive a packet of material from the federal agency containing information for designating PSRO areas. He also expressed the hope that doctors would continue to take the lead in implementing this law, rather than have nonmedical personnel make the regulations for them.

Missouri's executive staff, Delegates and officers maintained a hospitality room in the convention's hotel headquarters as a convenient place for any and all M.D.s to meet and visit and plan and as a place to return the hospitality of other state delegations. The Delegates and Alternates who represent Missouri at the AMA are conscientious and do a fine job. We can all be proud of them.

One who served his colleagues in this capacity for many years was the late Dr. Arthur W. Neilson of St. Louis. We will all miss his leadership and guidance.

Dr. Hector Benoit of Kansas City won reelection to the Council on Medical Services and will ably represent us at the national level.

Must vasodilators and therapy for other diseases come into conflict?

not if the vasodilator is

VASODILAN®

(ISOXSUPRINE HCl)

the compatible vasodilator… no treatment conflicts reported

The cerebral or peripheral vascular disease patient often has coexisting disease[1] which calls for another drug along with his vasodilator. It may be a hypoglycemic, miotic, antihypertensive, diuretic, anticoagulant, corticosteroid, or coronary vasodilator.

Vasodilan is not incompatible with any of these drugs—no treatment conflict has been reported. And, unlike other vasodilators, Vasodilan has not been reported to affect carbohydrate metabolism, liver function, or intraocular pressure—or to complicate treatment of diabetes, hypertension, peptic ulcer, glaucoma, or liver disease.

In fact, there are no known contraindications to the use of Vasodilan in recommended oral doses, other than that it should not be given in the presence of frank arterial bleeding or immediately postpartum.

Indications: Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.
3. Threatened abortion.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.

Dosage and Administration: 10 to 20 mg. three or four times daily.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Adverse Reactions: On rare occasions, oral administration of the drug has been associated in time with the occurrence of severe rash. When rash appears, the drug should be discontinued. Occasional overdosage effects such as transient palpitation or dizziness are usually controlled by reducing the dose.

Supplied: Tablets, 10 mg.—bottles of 100, 1000, 5000 and Unit Dose; 20 mg.—bottles of 100, 500 and Unit Dose.

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[1] Gertler, M. M., et al.: Geriatrics *25* 134-148 (May) 1970.

Woman's Auxiliary

50th Anniversary

I am writing en route from the Annual Convention of the AMA and the AMA Woman's Auxiliary in New York City on June 25-28 to report on highlights of this outstanding national meeting at which the MSMA Woman's Auxiliary again was recognized.

As always, I was proud to be a part of our Missouri Delegation. The Missouri Auxiliary is regarded nationally as being "right at the top" in our accomplishments and efforts toward improving the quality of health care. Also, we were awarded a certificate for increasing our membership in 1972-1973.

The AMA Annual Convention is a highlight of our auxiliary year. It provides a special opportunity to learn about the projects and accomplishments of all the other state auxiliaries and to compare notes, so to speak. It is an inspiring experience. We also learn from the distinguished speakers who are featured.

It was a privilege to hear Harry Schwartz, Ph.D., who spoke to the House of Delegates. A member of the Editorial Board of the *New York Times*, Mr. Schwartz is the author of "The Case for American Medicine." He stated that if the revolutionary proposals of the most radical critics for transforming American Medicine are adopted, medical care in this country will cost more but provide less care for millions of the aged and poor. Everyone interested in medicine should read his book.

Mrs. Charles R. Willman
President

Mrs. Robert Beckley, retiring President of the AMA Woman's Auxiliary, presented a check for $965,256 to Kenneth C. Sawyer, M.D., AMA-ERF president. This check represented the largest amount of money every raised by the Woman's Auxiliary and contributed to this important fund. Our goal for 1973-1974 is $1 million, and we will need the help of every doctor and doctor's wife to reach that goal.

Mrs. Willard Scrivner of East St. Louis, Ill. was installed as President of the AMA Woman's Auxiliary for 1973-1974. Many of you met Mrs. Scrivner when she was a distinguished guest at our MSMA Auxiliary Convention in St. Louis this spring. She asked us all to assume the many tasks ahead and to aid the medical profession in its objectives and efforts for improvement in the quality of life through better health care for every American.

Miss Margaret Wolfe, who retired on July 1, was honored for her 31 years of service as executive secretary of the AMA Woman's Auxiliary. She received a lovely gold watch as a token of appreciation.

The Missouri Delegation held its breakfast on June 25 at the Waldorf-Astoria Hotel with 16 Delegates, Alternates and guests attending. Once again, I and the other members of the Woman's Auxiliary express our appreciation for the interest shown by the entire Delegation.

EDITORIAL

CHANGE IS ETERNAL!

While most of us would agree with the above, the majority of physicians tend to be passive rather than active in what is going on in the world around them. During the past year, the St. Louis County Medical Society has shown change in that the meeting pattern reverted to monthly gatherings, most of which were well attended, especially where the personal interests of the physicians were concerned.

In hospital corridors, social gatherings and wherever physicians meet, there is talk of "socialized medicine, the changing order of things, take-over by universities, HMOs and now HR-1." My personal experience in such gatherings has been only to hear various mutterings from physicians, sometimes regretful and sometimes angry. "It is easy to criticize Senator Kennedy and others seeking social change, but mere disagreement is in no way constructive or helpful."

It is a rare experience for doctors to get together and help make the wheel go in the direction it should, namely, in such a way that it will benefit not only the practice of medicine but directly benefit the community.

Many doctors have become too busy to attend to the matters above, and to a large degree have abdicated these functions to social scientists and politicians. Texas Congressman Burleson recently observed that doctors do not write their congressmen. The legislators ARE interested! In addition to writing congressmen, much more would be accomplished by active participation in your medical society so that knowledgeable forces could guide and assist those concerned with health care problems.

It is true that the American physician is held in high esteem by the community. This status must be preserved and we physicians can help preserve it by moving in a positive direction. We must not ignore the problems that exist in the practice of medicine. It will only antagonize the consumer rather than help the cause of the physician if we are obstructive rather than constructive.

Let us, as physicians, unite and use the already present and potentially powerful frameworks of the medical societies, both local and national, to express our views. Since change IS eternal, let us, as interested and dedicated physicians, be forces in change for the better, not only for our profession, but for all people.

JACK R. EIDELMAN, M.D.
St. Louis County Medical Society Bulletin

LETTERS to the Editor

To the Editor:

I am editing a book on renowned and notable physicians and their faiths.

I am interested in obtaining contributors who have a special knowledge of the faith or religion or both of one or more notable and outstanding physicians. I am considering such physicians as Sir William Osler and Sir William Fleming. However, the notable physicians could still be alive.

Anyone interested in this project or who would suggest renowned physicians to write about may contact me at the following address:

Claude A. Frazier, M.D.
4-C Doctor's Park
Asheville, N. C. 28801

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County Society News

FIRST DISTRICT

COUNCILOR
JOHN N. MARTIN, M.D., ST. JOSEPH

Buchanan County Medical Society

Sixty-two physicians and dentists from St. Joseph and Northwest Missouri attended the 21st consecutive annual joint meeting of the Buchanan County Medical Society and Northwest Dental Society on May 2.

The two organizations' presidents, Elza F. Butler, M.D. and Donald W. Barr, D.D.S., presided jointly at the dinner and program held at the St. Joseph Country Club.

The speaker was Ronald Gier, D.D.S., chairman of the Department of Oral Diagnosis of the University of Missouri-Kansas City Dental School. He presented a paper on "Pain Evaluation and Treatment."

G. Tyson Carpenter, M.D., *Secretary*

SIXTH DISTRICT

COUNCILOR
WILLIAM D. BRADSHAW, M.D., CLINTON

West Central Missouri Medical Society

The spring meeting of the West Central Missouri Medical Society was held at Irene's Harvest House in Harrisonville on June 7.

Members present were Drs. Curtis W. Long, President; John Torontow, Secretary; Alfred W. Ecklund, Robert D. Henry, Robert L. Wheeler and Edward S. Jones, Cass County; Robert L. Magee, Cedar County; and Arthur L. Hansen, Bates County.

The speaker for the evening was Dr. Robert Raich from St. Luke's Hospital in Kansas City, who gave an excellent talk on "Newer Aspects of Drug Therapy in Tuberculosis."

President Long called the business meeting to order. There was a discussion of problems associated with the poor delegate attendance at the MSMA Annual Session this year. It was the feeling of the group that one of the problems associated with attendance at the St. Louis meeting is that St. Louis is a considerable distance from the Medical Society area. Some members voiced the feeling that they would like to see the convention held at a more central location, if possible.

The Society decided to remove itself from activities associated with the Mid-Missouri Comprehensive Health Care Planning Unit in Kansas City. Also, there was a discussion regarding the possibility of accepting Osteopathic members into the Society. It was pointed out that a Bylaws change would be necessary and the general feeling of the membership is that they do not desire to make this change at this time.

There being no further business, the meeting was adjourned.

R. John Torontow, M.D., *Secretary*

Annual Congress on Occupational Health

The 33rd Annual Congress on Occupational Health will be held at The Benjamin Franklin Hotel in Philadelphia on September 17-18.

The Congress will be cosponsored by the AMA Department of Environmental, Public and Occupational Health; American College of Radiology; and National Institute for Occupational Safety and Health, U. S. Department of Health, Education and Welfare.

Russell B. Roth, M.D., President of the American Medical Association, will deliver the keynote address at 9 AM on September 17.

Arthur W. Neilson, Sr., M.D., St. Louis, will preside at the session at 1 PM on September 17. He is a member of the AMA Council on Environmental, Occupational and Public Health.

The distinguished guest lecture will be delivered at 3:15 PM on September 18 by Theodore F. Hatch, Sc.D., Emeritus Professor, University of Pittsburgh.

The Physician's Award Luncheon will be held at 12:15 PM on September 18.

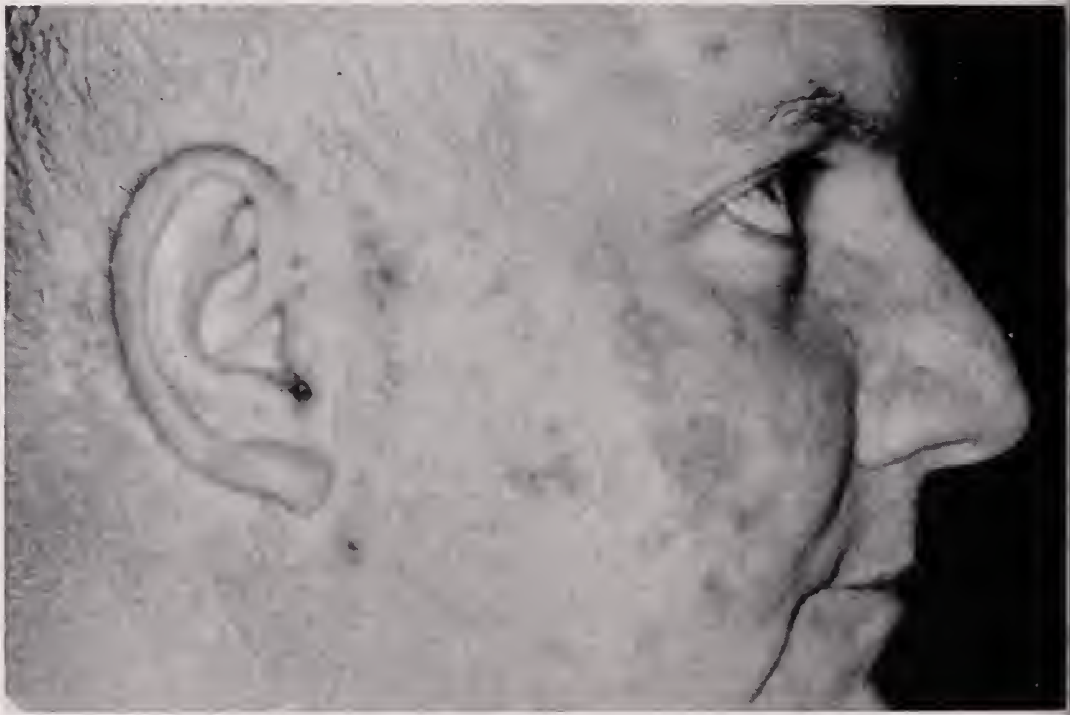
The Congress Program is acceptable for credit toward AMA Physician's Recognition Award and for 12 elective hours by the AAFP.

Advance registrations are $25 for AMA members or industrial nurses, $15 for medical students and $35 for all others. Wives of registrants are admitted free. Registrations should be addressed to Department of Environmental, Public and Occupational Health, AMA, 535 N. Dearborn, Chicago, Ill. 60610.

What's on you patient's face...

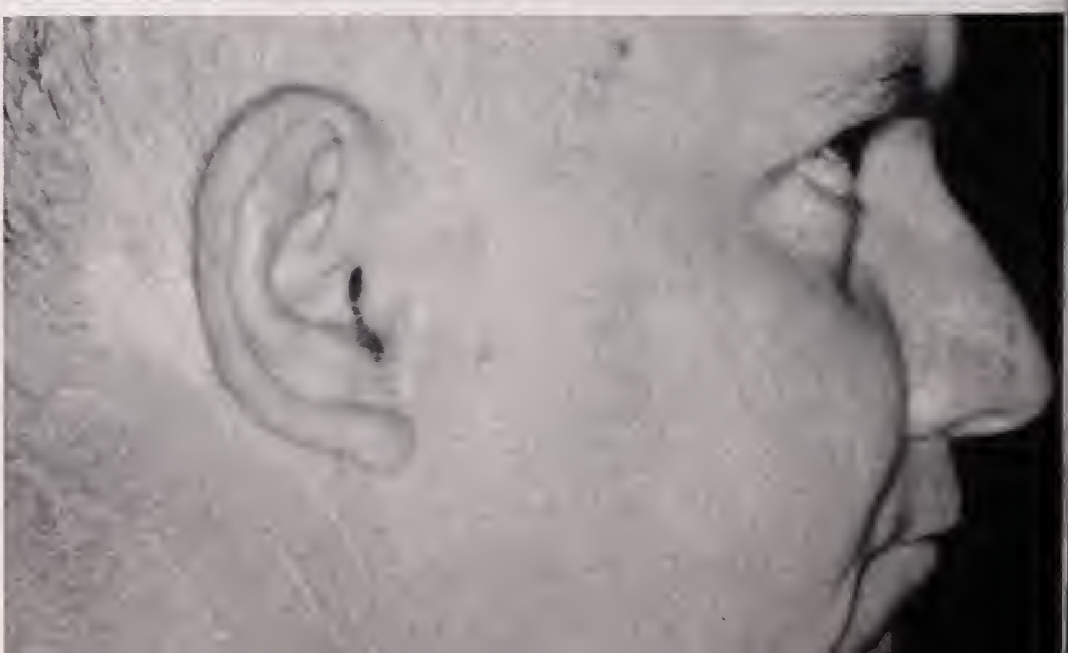
may be more important than his chief complaint

Patient P.T.* seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual scarring on ridge of nose from previous cryosurgical and electrosurgical procedures.



Patient P.T.* seen on 6/12/67, seven weeks after discontinuation of 5% FU cream. Reaction has subsided. Residual scarring not seen except that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J



he lesions on his face re solar/actinic– -called "senile" keratoses... nd they may be premalignant.

lar, actinic or senile keratoses

se lesions may be called by several names, but they
lly can be identified by the following characteris-
The typical lesion is flat or slightly elevated, of a
nish or reddish color, papular, dry, rough, adherent
sharply defined. They commonly occur as multiple
ns, chiefly on the exposed portions of the skin.

quence of therapy– ectivity of response

r several days of therapy with Efudex® (fluorouracil),
hema may begin to appear in the area of the lesions;
reaction usually reaches its height of unsightliness
discomfort within two weeks, declining after dis-
inuation of therapy. This reaction occurs in affected
s. Since the response is so predictable, lesions that
ot respond should be biopsied.

ceptable results

tment with Efudex provides highly favorable cos-
c results. Incidence of scarring is low. This is par-
larly important with multiple facial lesions. Efudex
ld be applied with care near the eyes, nose and mouth.

Before prescribing, please consult complete product information, a summary of which follows:

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Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

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New Members

Mario Carrera, M.D., 9408 W. Milton, St. Louis, has become a member of St. Louis County Medical Society. Dr. Carrera is a native of Ecuador, received his preliminary education at National Institute and his M.D. degree at Central University of Ecuador in 1967. He specializes in general practice.

Bolivar M. Escobedo, M.D., 1035 Bellevue, St. Louis, has become a member of St. Louis County Medical Society. Dr. Escobedo is a native of Lima, Peru, received his preliminary education at St. Marcos University and his M.D. degree at St. Marcos University in 1967. He specializes in obstetrics and gynecology.

Philip Richard Fogle, M.D., 304 Professional Bldg., Springfield, has become a member of Greene County Medical Society. Dr. Fogle is a native of Springfield, received his preliminary education at Emory University and his M.D. degree at the University of Missouri in 1966. He specializes in obstetrics and gynecology.

William B. Hardin, M.D., 2821 N. Ballas Rd., St. Louis, has become a member of St. Louis County Medical Society. Dr. Hardin is a native of Houston, Tex., received his preliminary education at Rice University and his M.D. degree at the University of Texas in 1957. He specializes in neurology.

Jay Lawrence Liss, M.D., 911 S. Brentwood Blvd., St. Louis, has become a member of St. Louis County Medical Society. Dr. Liss is a native of St. Louis, received his preliminary education at Washington University and his M.D. degree at Washington University in 1966. He specializes in psychiatry.

Donald E. Parkison, M.D., Seligman, has become a member of Ozarks Medical Society. Dr. Parkison is a native of Ansley, Neb., received his preliminary education at Nebraska Wesleyan University and his M.D. degree at the University of Nebraska in 1956. He is in family practice.

Carlos A. Petit, M.D., Aurora Community Hospital, Aurora, has become a member of Ozarks Medical Society. Dr. Petit is a native of Peru, received his preliminary education at Alfonso Ugarta and his M.D. degree at Cordoba University in 1960. He specializes in surgery.

Sterling Theobald, M.D., Box 368, Camdenton, has become a member of Mid-Missouri County Medical Society. Dr. Theobald is a native of Canada, received his preliminary education at Manchester College and his M.D. degree at Indiana University in 1956. He is in family practice.

Amos Welner, M.D., 4940 Audubon, St. Louis, has become a member of St. Louis County Medical Society. Dr. Welner is a native of Israel, received his preliminary education at Hebrew University and his M.D. degree at Hebrew University in 1960. He specializes in psychiatry.

In Memoriam

Elmer E. Glenn, M.D., 10639 Roundelay Circle, Sun City, Ariz., a graduate of St. Louis University, 1924; member Greene County Medical Society; age 76; died April 6, 1973.

Lawrence D. Thompson, M.D., 1114 Evergreen Lane, Columbia, a graduate of Cornell University, 1922; member St. Louis Medical Society; age 81; died April 18, 1973.

Walter Rohlfing, M.D., 3838 Federer, St. Louis, a graduate of Washington University, 1911; member St. Louis Medical Society; age 83; died April 19, 1973.

Jess E. Burks, M.D., 3809 N. Union Blvd., St. Louis, a graduate of St. Louis University, 1945; member St. Louis Medical Society; age 53; died April 25, 1973.

Durand Benjamin, M.D., 7430 Virginia Ave., St. Louis, a graduate of St. Louis University, 1931; member St. Louis Medical Society; age 65; died May 23, 1973.

Timothy S. Bourke, M.D., 4620 Nichols Parkway, Kansas City, a graduate of Washington University, 1910; member Jackson County Medical Society; age 90; died May 29, 1973.

George M. Park, M.D., 825 S. Hanley Rd., St. Louis, a graduate of Washington University, 1905; member St. Louis County Medical Society; age 90; died June 2, 1973.

Daniel D. Klaff, M.D., 4511 Forest Park Blvd., St. Louis, a graduate of the University of Virginia, 1936; member St. Louis Medical Society; age 60; died June 3, 1973.

Edwin L. Sheahan, M.D., 1265 Swims Valley Dr., N. W., Atlanta, Ga., a graduate of Washington University, 1905; member St. Louis Medical Society; age 90; died June 4, 1973.

William B. Richter, M.D., Public Square, Stockton, a graduate of the University of Tennessee, 1938; member West Central Missouri Medical Society; age 59; died June 7, 1973.

Sylvester H. Pranger, M.D., 52 Maryland Plaza, St. Louis, a graduate of St. Louis University, 1927; member St. Louis Medical Society; age 70; died June 9, 1973.

Morton P. Hanet, M.D., 415 E. 63rd, St. Louis, a graduate of George Washington University, 1951; member Jackson County Medical Society; age 46; died June 15, 1973.

James G. Montgomery, M.D., 310 W. 49th, Kansas City, a graduate of Rush Medical College, 1913; member Jackson County Medical Society, age 90; died June 17, 1973.

William J. Shaw, M.D., Fayette, a graduate of the University of Nebraska, 1925; member Howard County Medical Society; age 81; died June 22, 1973.

Robert F. Hickey, M.D., 15 Cricklewood Pl., St. Louis, a graduate of St. Louis University, 1926; member St. Louis Medical Society; age 72; died June 25, 1973.

Luke A. Knese, M.D., 31271 Paseo Sereno, San Juan Capistrano, Calif., a graduate of St. Louis University, 1936; member St. Louis Medical Society; age 61; died June 27, 1973.

From the Medical Schools

(Continued from page 595)

Symphony Hall. Conferral of degrees was made by Rev. Paul C. Reinert, S.J., University president, who presided at the graduation exercises. Dr. Theodore A. Cooper, director of the National Heart and Lung Institute of the Department of Health Education and Welfare's National Institutes of Health, who spoke on "Precious Life and Costly Care" received both the M.D. and Ph.D. degree in physiology at St. Louis University. He also was the recipient of the alumni merit award in medicine conferred by St. Louis University during Founders Week in 1972.

Dr. Natalie Ann Connors, assistant professor of anatomy and Dr. Arthur E. McElfresh, Jr., professor and chairman of the Department of Pediatrics at the School of Medicine, were named the winners of the Golden Apple Awards for the best teachers.

Dr. Connors was chosen as the best teacher for the freshman and sophomore years of study while Dr. McElfresh was selected as the best teacher for the clinical years of study.

The 1973 graduating class gave the School an American College of Physicians New Medical Skills Library. The audiovisual teaching tool has a film viewer and book which can be used by the medical students and interns.

Dr. Philip A. Katzman attended the First Symposium on Ribosomes and Ribonucleic Acid Metabolism held at Smolenice Castle, Czechoslavakia on June 17-23. The symposium was sponsored by the Biological Instiute of the Slovak Academy of Sciences in Bratislavia. Dr. Katzman presented a paper titled "Effect of Adenovirus 2 Infection of KB Cells on the Synthesis and Methylation of rRNA and tRNA. Theodore W. Munns was co-author.

Many members of the biochemistry department attended the International Congress of Biochemistry in Stockholm July 1-7. Scientists who presented papers included Dr. Robert E. Olson, Dr. Ronald S. Cockrell, Graduate fellows Michael G. Douglas and William P. Dubinsky, Dr. Carmine J. Coscia, Dr. William H. Elliott and Dr. Katzman. Dr. Elliott was the recipient of a travel grant by the American Society of Biological Chemists which enabled him to attend the Congress and also visit laboratories in Glasgow, Edinburgh, London and Paris. Dr. Max K. Horwitt is chairman of the International Symposium on Vitamin E scheduled to be held in Minneapolis on September 26-27.

The Council Reports

(*Continued from page 591*)

did see their elected officials or their legislative aides to indicate to them that medicine's views on PSRO should be given attention and informational material was left with them. After looking at the material and at the law, it is hoped that they would be willing to contact HEW Secretary Weinberger. Dr. Benoit stated that he felt more formal trips to Washington by representatives of MSMA with better preparation, to the extent of having luncheons and meetings with the Missouri elected officials, should be looked at more than in the past.

Dr. Benoit, as a member of the AMA Council on Medical Service, reported on the activities of that Council. The Council had a meeting in Washington with people from the Bureau of Health Insurance and went over such problems as reimbursements under Medicare and Medicaid; the role which they visualize the physician assistant has; etc. Another matter discussed quite extensively has to do with including all people on dialysis under Medicare. A lot of the input that the Bureau of Health Insurance had on this matter was from an ad hoc committee of the National Kidney Foundation. We reviewed some of the reports having to do with this program. The Council on Medical Service took strong exception to the per capitation concept with the basic philosophy being that what is really different in chronic renal dialysis than other diseases such as diabetes, arthritis, etc. The Bureau of Health Insurance would have the sole power to certify and recertify the centers. Any patient not considered as a potential transplant candidate could not be on the program. The program called for extremely elaborate review mechanisms on a local, regional and national basis. Appropriate letters were sent to BHI and Secretary Weinberger regarding this proposal.

Lengthy discussion followed in regard to Dr. Benoit's report. Many questions arose regarding the Health Care Foundation and PSRO. Dr. Benoit stated that a hospital will not qualify as a PSRO, no matter how large it is. He stated that his personal goals for the HCF regarding PSRO would be for the HCF to act as an umbrella organization and become the contracting agency with HEW to see that PSRO is done right in Missouri. He feels that the local review areas of HCF should be able to qualify as separate PSROs. Dr. Benoit stated that there would be a State Advisory Council to serve as a second step between what goes on in a local PSRO and the National Advisory Council. No PSRO will be approved unless at least 50% of the physicians in the area agree to it. However, the review process will be 100%.

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Dr. Benoit then called attention to Intermediary Letter #10 which calls for establishment of preadmission certification on all beneficiaries under SSA Health Care Programs in every hospital in the country by July 1, 1973. He said that he was told that this is only an advance copy and was directed to the Regional Offices for discussion.

Dr. Benoit said that the Health Care Foundation is writing every member of the Missouri delegation in Congress, pointing out what the PSRO law calls for, what the problems are and what the HCF has to offer to try to implement the law.

It was suggested that along with the legislators being educated, the MSMA should be educating the physicians, since many aspects of this law are not clear to them.

Mr. Mortenson indicated that a bulletin that came to the AMA Office just prior to the Council Meeting gave the names of the physicians appointed to the National Advisory Council on PSRO. He stated that at least four of these individuals are strong friends of organized medicine.

Dr. Cope pointed out that during the trip to Washington, they were assured that probably no regulations concerning PSRO would be forthcoming until after the program is well underway.

Dr. Chandler thanked Dr. Benoit for bringing the Council up to date on the various activities.

REPORT OF THE MISSOURI DIVISION OF HEALTH

Dr. Domke indicated that most of those present were acquainted with the "Icepick" Program of the Division of Health. He stated that the State Board of Health has taken the position that the Hospital Discharge Data Program should be a required activity and that the program should be carefully developed in cooperation with MSMA, MAOPS, HCF and the Hospital Association. Dr. Domke said that the Board of Health would like to get a system which will not lead to duplication or conflict with any other system being used. He stated there are demands for good hospital use data and this program can be developed to provide the information that users and providers need without having conflicting systems. He indicated that the Board would like to have providers and users participate in the design of the program. Dr. Domke said that presently, 80% of the hospitals and 65% of the discharges in the state in the program are on a voluntary basis. He stated that the hospital associations are eager to see a system that will avoid duplication and that the present "Icepick" Program probably is not sufficient for most hospitals and the medical profession. The only additional cost involved would be for providing the data on the face sheet of a chart. He indicated that we have a poor impression of what is going on in hospital utilization in the state, primarily because the "Icepick" Program has almost 100% participation in rural areas, but does not have good participation in the metropolitan areas.

Dr. Domke stated that the Board of Health was asking participation and review to see if we can have a single state system that would be satisfactory to providers as well as economical in getting the information out.

Mr. McIntyre asked that since this program would be made mandatory, if there would be any additional cost to hospitals in supplying this information. Dr. Domke stated that the present program is funded out of their general fund. Basically, the information required would be face sheet information and the Division of Health would provide forms if hospitals wanted them, but they would take the information in any form. Dr. Chandler stated that Dr. Domke had written a letter asking for the views of MSMA in regard to this program and he did not see that this required any action.

Dr. Domke reported that the bill deleting mandatory smallpox vaccination from state statutes had been sent to the Governor. He stated that Senate Bill #57, which calls for regulation of ambulances, is awaiting final passage.

Dr. Domke said that he would like to call the Council's attention to Senate Bill #103, which calls for a Division of Developmental Disabilities for the mentally retarded. The purposes would be to provide leadership in the planning, operation and evaluation of all programs for the developmentally disabled and to establish priorities and use funds to assure the orderly development of a statewide comprehensive network of services for them. He indicated that perhaps the bill should have attention from the Legislative Committee.

REPORT OF THE LEGISLATIVE COMMITTEE

Dr. Matthews presented a list of favorable Senate bills and Senate bills of interest that the Legislative Committee had been following. Dr. Matthews also presented a list of favorable House bills and House bills of interest to the Council. Dr. Matthews informed the Council that several House bills had been stricken from the calendar.

Dr. Matthews stated that Dr. Domke had brought up Senate Bill #103 and that the Committee will look into it further and try to get an opinion about the bill.

Dr. Matthews stated that he would like to extend congratulations to the staff who have worked hard and long this session because it looks as if this will be a most productive year.

Motion was made by Dr. Hetlage to accept this report with commendation. Motion was seconded and carried.

CANCER RESEARCH CENTER

Dr. William Donegan of the Cancer Research Center indicated that he appreciated the privilege of bringing before the Council the proposal by the Center for "Breast Cancer Detection Projects" and asked for MSMA approval and support.

This project is sponsored by the National American Cancer Society and the National Cancer Institute. Facilities will be established to provide a comprehensive screening examination for asymptomatic women at no cost to them using physical examination, mammography and thermography. Any individual with suspicious findings is referred to her family physician or a physician of her choice for definitive diagnosis and treatment. Dr. Donegan stated that an examination of this type can detect breast cancer early enough to effect a cure rate. He indicated that this type of examination has been tried before on a limited basis and seems to work.

Dr. Cope asked about the cost of the project. Dr. Donegan indicated that he was not sure as to the specific cost, but that it had been worked out at the National Cancer Institute. Dr. Stricker asked how often a woman should have one of these examinations. Dr. Donegan indicated it probably would be annually.

Motion was made by Dr. Hetlage to approve the program as outlined. The motion was seconded by Dr. Bach and carried.

MATTERS REFERRED TO THE COUNCIL BY THE 1973 HOUSE OF DELEGATES

Resolution regarding endorsement of American Physiological Society request for a Commemorative Stamp honoring William Beaumont, M.D.—Dr. Chandler indicated that the necessary correspondence had been sent to the Postmaster General.

Resolution regarding Bert Thomas—Mr. McIntyre reported on this in the Executive Secretary's report.

Resolution regarding M. Pinson Neal, M.D.—Copy of resolution has been sent to Dr. Neal.

Resolution #1—Emergency Medical Services—Called for President of MSMA to appoint ad hoc committee to work with organizations in this area. Dr. Chandler reported that we have an Ad Hoc Committee on Emergency Medical Services under the Public Affairs Commission, appointed by the Chairman of that Commission, and he would like to recommend to the President, subject to Council approval, that this present committee be reappointed. This recommendation was given Council approval.

Resolution #5—Medicredit Legislation—Correspondence has been sent to Dr. Howard of the AMA and to our Congressmen.

Resolution #9—Health and Hospital Insurance for Newborn—The Chairman referred this to the Legislative Committee for study and recommendations.

Resolution #13—Speaker's Qualifications—Mr. Noble pointed out that this would require a constitutional amendment. The Chairman referred this resolution to the Committee on Constitution and Bylaws.

Resolution #18—Insurance Claim Forms—The Chairman reported that this resolution has been sent to HIC and to the AMA Council on Medical Service, but a reply has not been received from them.

Resolution #19—Committee to Study Midwifery—The Chairman indicated that a committee had been appointed.

Resolution #20—Funds for MMPAC, to be used for educational purposes only—The Chairman indicated that this would be turned over to the Finance Committee to find a way to obtain the money.

Resolution #22—Exclusion of Regional Medical Programs from the Federal Budget—This resolution has been sent to the Missouri Congressional delegation.

Resolution #32—Regulation of Missouri Medical Service—The Chairman reported that a copy of the resolution has been sent to the Governor and to all members of the Missouri General Assembly.

Resolution #33—Introduction of Resolutions—Mr. Fox reported that this had been discussed at a joint

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meeting of the Commission on Continuing Education and Commission on Interspecialty Medicine as it would relate to the necessity of changing the time schedule for the Annual Session. He indicated that proposed time changes had been submitted to the joint meeting of the commissions. Mr. McIntyre reported that this had been discussed thoroughly and the entire group felt that without experiencing what might happen to the Annual Session time schedule, that, perhaps, it would be better to leave the time schedule as it is for another year. It was pointed out that a full Commission report would be given later in the meeting and that no decision or recommendation be made until that time.

Dr. Chandler stated that, perhaps, it would be a good idea to move the Council Meeting to 3 PM on Wednesday afternoon at the 1974 Annual Session. This had been suggested in the proposed time schedule given to the meeting of the joint Commissions.

Motion was made by Dr. Franklin that the Council Meeting on Wednesday afternoon of the Annual Session be moved to 3 PM. The motion was seconded and carried.

REPORT OF THE MEMBERSHIP COMMITTEE

Dr. Martin reported that the Membership Committee had met and the areas discussed were in three parts: (1) Projects for Immediate Implementation; (2) Study of Special Projects; and (3) MMPAC Educational Projects. Those items for immediate implementation are as follows: (1) Thank you letters to new and renewing members; (2) Letter urging reconsideration to physicians not renewing MSMA or AMA membership by July 1; (3) Statewide rural membership campaign from state level; (4) MSMA benefits brochure for present members, new members and nonrenewing members; (5) Welcome letter from state level to interns and residents, return would be to local societies; (6) Large component societies encouraged to undertake "person-to-person" campaign with I and R. This is being done in Kansas City and St. Louis, but, perhaps, the state might offer assistance to Boone County.

Special Projects included (1) Composition of a slide and script "road show" on MSMA/AMA benefits for use by Councilors at county meetings; (2) Year-end mailing to nonmembers by specialty society and hospital staff; (3) Implementation of practice-management workshop for interns, residents and students at schools and hospitals. MMPAC Educational Projects include: 1. Develop separate MMPAC Newsletter for educational purposes only; 2. Produce and distribute separate MMPAC Educational brochure; 3. Implement a viable MMPAC Educational Workshop for stressing voters' responsibility. Dr. Martin stated that this information was not sent out in advance to the Councilors and that, perhaps, they should look it over and discuss it later in the meeting.

REPORT OF THE WOMAN'S AUXILIARY

Mrs. Willman stated that she appreciated being invited to the meeting and that she would like to introduce Mrs. George Lytton of Kansas City, President-Elect of the Woman's Auxiliary.

Mrs. Willman reported that the Auxiliary held a Legislative Day on April 11 in Jefferson City. Approximately 100 women from 12 counties attended. Each county took their Senators and Representatives to lunch.

Mrs. Willman stated that she had visited in Hannibal and that the Auxiliary there had decided to again become active after having disbanded in 1965. She stated that she was glad to see the women in Hannibal become so interested.

Rally Day Workshops have been held covering nine districts. The Auxiliary has talked to approximately 300 doctors' wives about Auxiliary programs in order to better inform their members.

Mrs. Willman reported that the Auxiliary is planning an Ecology Seminar on September 21 in Kansas City. All County Presidents, Presidents-Elect and County Environmental Health Chairmen will be encouraged to attend. Mrs. Raymond Hartwig is working with the Environmental Protection Agency to provide funding. She encouraged all those present to attend.

Mrs. Willman stated that representatives from the Auxiliary would attend the following MSMA Committee meetings in order to better coordinate endeavors: Commission on Continuing Education and Health Manpower, Legislative Committee, Commission on Public Affairs, MMPAC and the Association's Medical Student Loan Foundation. She reported that she had given names to Dr. Chandler and that the Auxiliary would be glad to help in any way they could.

REPORT OF THE BUILDING COMMITTEE

Dr. Matthews reported that the staff had moved into the new building and are happily located. He stated that he hoped all of those present will tour the new building later in the afternoon. He indicated that they are still a few items that need to be installed, but that they are on order. Dr. Matthews stated that the overall arrangements and development of the building have been extremely satisfactory and hoped that everyone will like it.

Dr. Matthews reported that final details regarding financing have not been developed as yet. Final bills are about to be accumulated. Then, it will be the responsibility of the Finance Committee to handle the loan program.

REPORT OF MISSOURI FAMILY PLANNING HEALTH COUNCIL

Dr. William Allen reported that he had represented MSMA at an organizational meeting of the Missouri Family Planning Health Council and that the MSMA has been requested to name a representative to serve on the Board of Directors of this Council. The purpose of the Council is to become the coordinating agency for family planning projects in outstate Missouri, but the Council would not affect metropolitan family planning projects.

Dr. Allen stated that the Family Planning Council in Missouri had been urged by HEW to submit a state proposal for family planning. The Bylaws of this Council provide for a 24-member Board and call for representation from MSMA, MAOPS, Missouri Nurses Association and a physician to be appointed by the President of the Board. The latter also is to be Chairman of the Medical Advisory Committee. The Board will meet quarterly and the Council will meet twice yearly. A grant proposal of approximately $2 million, which has been submitted, would not cover the entire state immediately.

Dr. Allen stated that he felt that although the project proposal had been submitted and the Bylaws adopted, this group could use medical direction and urged MSMA to give serious consideration to appointing someone to serve on this Board. He also stated that he fully agreed with the four recommendations of the Ad Hoc Family Planning Committee which were presented to the Council in September. The recommendations are as follows:

1. Recommend that due to the divergence in nature

of the clinics, local medical societies and/or local physicians be urged to take a more active role in the establishment and operation of family planning clinics.

2. Recommend frequent appraisal of each clinic's programs as to its continued effectiveness and in its respect for medical ethics.

3. Recommend frequent appraisal of the clinic's programs in such areas as number of patients reached and costs-per-patient.

4. Recommend frequent appraisal of the clinics as to the extent they are invading the private practice of medicine.

Dr. McAlhany asked if this program would void those now in existence. Dr. Allen stated that the programs now in existence would make application to this group rather than directly to Washington.

Dr. Hansbrough indicated that the MSMA should go on record as reminding that Board of our recommendations in these four fields. Dr. Chandler stated that the MSMA had been asked to appoint a member to the Board and that man can take these recommendations to the Board.

Dr. Domke stated that the Council recommendations are sensible and, at least, provide a minimal guide to evaluating a project. Dr. Domke stated that he would like to recommend that in addition to sending the information about Council action to that group, that we also forward it to the Governor's Advisory Council on Comprehensive Health Planning, A & B agencies and to the Board of Health. He stated that the recommendations are sound and would provide some basis for this. The Council also would be able to see that there is some statewide review of what these programs were accomplishing.

Motion was made, seconded and carried that these four points be sent to the Division of Health, A & B agencies and the Governor's Advisory Council on Comprehensive Health Planning and that MSMA appoint a member to the Board as requested by the Family Planning Health Council. Dr. Chandler asked Dr. Stricker to make the appointment.

Dr. Chandler stated that a request had been received from the AMA Council on Foods and Nutrition asking for MSMA endorsement and cosponsorship of a program of seminars and lectures on college campuses this fall. The program is to inform students and faculty of recent developments and to stimulate interest in the medical sciences. The colleges participating in Missouri are Central Missouri State, Drury College, Missouri Southern College, Northwest Missouri State, Northeast Missouri State and Southeast Missouri State College.

Motion was made by Dr. Gunn to give MSMA endorsement to this program. It was seconded by Dr. Hansbrough and carried.

Dr. Martin asked that Missouri Western in St. Joseph be added to the list of colleges.

MSMA-SPONSORED TOURS

Mr. Cooper reported that the Rhine Tour is selling exceptionally well. Approximately 140 persons have signed for the tour. Another mailing will be sent late in June.

Mr. Cooper indicated that a travel committee, consisting of Drs. Cooper, Bregant and Martin, had a meeting and that Dr. Cooper would make a report regarding future tours.

Dr. Cooper indicated that the committee had considered three tours as follows: Greek Tour, European Tour and a Hawaiian Tour.

Dr. Cooper moved that the three tours be accepted for MSMA in 1974. Motion was seconded and carried.

REPORTS OF THE DEANS

Dr. Mayer stated that he would like to present a follow-up report on several items that he presented previously. He indicated recommendations had been made to the Chancellor for names for the Provost for Health Affairs at the University.

Dr. Mayer reported that the University had a significant increase in the number of applicants for medical school. The University had 570 Missouri applicants last year and 700 applicants this year. Of the 700 applicants, 140 had been accepted by the University.

Another item he reported on was the University budget. Dr. Mayer stated that the University would be in trouble with operational dollars if the budget were not approved by the General Assembly. Dr. Mayer indicated that the report of the National Board of Medical Examiners had been released recently and that he could obtain copies for the members of the Council, if they so desire.

Dr. Mayer stated that he would like to comment in regard to HR #1. The law separates teaching hospitals and their physicians as totally separate from the rest of the practitioners. The SSA will be deciding whether teaching hospitals will be cost hospitals or usual and customary fee hospitals. There is a high likelihood that the University Hospital will be a cost hospital.

Dr. Mayer stated that he had the good fortune to be involved in some national medical activities and would be glad to be helpful in the communication processes at this level.

Dr. Noback reported that the Medical School in Kansas City had graduated nine students. All have taken part two of the National Boards and have passed. The family practice preceptorship program in Year 2 will start its second year in about a month. This program provides each Year 2 student a month with a family practitioner in Western Missouri.

Dr. Noback reported that the Kansas City Medical School has had a quarterly profile examination in existence for just over a year. One part deals with the evaluation of the students and the other part deals with factual information.

Dr. Noback stated that there has been increasing interest in the school on the part of students. This year they received just under 400 applicants from Missouri.

TAP INSTITUTE

Mr. Fox, in the absence of Dr. Ladyman, reported on the TAP Institute which had been cosponsored by MSMA and the Hospital Association. Dr. George Ladyman, Chairman of the Commission on Continuing Education, represented the MSMA and gave the welcoming address at the first session. The program was presented by

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the Joint Commission on Accreditation and consisted basically of three sessions covering utilization review, medical audit, credentials, legal liability and administration. It was pointed out that it is evident that JCAH hopes to be involved in the administration of PSRO. Mr. Fox stated that two of the Councilors, Drs. Martin and Chandler, were present at the institute representing local medical society staffs and, perhaps, they would like to make a few comments.

Dr. Martin stated that the only comment he would like to make was that he was impressed with Mr. Jacobs from the JCAH, who conducted the program. Dr. Chandler stated that he was interested in the medical audit area of the program. He stated that General Hospital in Kansas City had been using this for some months, that it was very appealing and would be to all doctors since they set up their own criteria for such an internal audit.

Motion was made by Dr. Hansbrough that Dr. Ladyman's report be accepted with commendation. Motion was seconded and carried.

REPORT OF JOINT MEETING OF COMMISSIONS ON CONTINUING EDUCATION AND INTERSPECIALTY MEDICINE

Mr. Fox, in the absence of Dr. Ladyman, reported that the Commission on Continuing Education and Commission on Interspecialty Medicine had met jointly to discuss the past annual session and plan the 1974 Annual Session. The two groups discussed revision of the Bylaws by the House of Delegates during this year's annual session regarding introduction and processing of resolutions. The joint Commissions recommended that for one more year at least, the present time schedule should be retained and, pending experience at the Kansas City meeting in 1974, time schedule revision would be reconsidered. It also was recommended that the General Session on Saturday morning be replaced with one or more scientific sessions sponsored by the respective specialties and that concurrent scientific sessions be set at a maximum of five.

Dr. Young's proposal for guidelines to set up a statewide CME program also was discussed. The Commission on Interspecialty Medicine agreed to contact their respective specialty organizations regarding development of guidelines. The Commission will request that the medical specialty representatives respond by Jan. 1, 1974, indicating their willingness to draft respective guidelines.

Dr. Franklin moved that the Commission's recommendations on the format for the Annual Session be accepted. Motion was seconded and carried.

Mr. Fox stated that the date of April 17-20, 1975, Chase Hotel, was being held for the 117th Annual Session and that the Hotel needs confirmation of this date. He indicated that other hotels in St. Louis had been checked, but none met our space requirements.

Dr. Hetlage moved that the above recommendation for the 1975 Annual Session be accepted. Motion was seconded and carried.

Dr. Hansbrough moved that the entire Commission report be accepted. Motion was seconded and carried.

Dr. Chandler stated that requests from Dr. Howard of the AMA had been received asking for names of individuals for various federal commissions and committees. Often these come on such short notice, and there is not enough time to contact these individuals or prepare CV's on them. Dr. Chandler stated that we should be given more warning, and that he would like for Mr. Mortenson to carry this message back to the AMA and report back at the next meeting on the mechanism of recommending people.

MEMBERSHIP COMMITTEE

Dr. Martin stated that some action needed to be taken in regard to the budgetary items in the membership committee report that had been given previously. He stated that some of the items in the report were of an immediate nature and need to be funded.

Motion was made that money be spent and other money budgeted for the purposes outlined in Dr. Martin's report. Motion was seconded and carried.

Dr. Chandler stated that Dr. Finnegan was present and, perhaps, he would like to say a few words. Dr. Finnegan thanked the Council for the nice presentation at the Annual Meeting. He stated that he is indebted to Helen Penn, Allen Smith and Jean Duensing, who have been managing editors since Dr. Finnegan has been Editor, for their real service to the Journal.

Dr. Judd stated that he did not have a Treasurer's Report at this time, but would present a full report at the September meeting.

Dr. Judd reported that a service offered recently by the AMA had come to his attention and that he would like to mention it at this time. On request, the AMA sends a survey team to local and state societies to examine methods of operation and make suggestions on various matters that could be improved. He indicated that the St. Louis Medical Society had looked at this and had requested the AMA to send a team to St. Louis. Dr. Judd stated that he would like to recommend that MSMA ask the AMA to send a survey team to the State Association. He indicated that this was not criticism of the operation of the Association, but might be a means of improving the association to make it more attractive to new members. This service is to be provided by the AMA without cost to the Association.

Dr. Martin asked who composed the survey team. Mr. Mortenson stated that this service is provided by the Field Service Department and consisted of five or six individuals selected by Mr. Layton, head of the Field Service Department. The team varies from state to state and covers a period of three or four days. He reported that the survey team looks at what the society is doing, whether it is doing it right and how the society can improve things. The motion was made, seconded and carried that the MSMA ask the AMA to send a survey team to the State Association.

Dr. Cope stated that he would like to present a suggestion in regard to long range planning and financing. He indicated that he had sent this suggestion to Dr. Dave Kerr, Chairman of the Planning Committee, and that it eventually would come before the Council.

Dr. Cope stated that many times requests for unbudgeted money were made and many good, worthwhile suggestions and ideas have gone down for lack of money. He stated that the Missouri State Medical Foundation is now funded at the level of about one-half million dollars and that loans are being repaid, although not as fast as desired. Dr. Cope said that his suggestion was that the special assessment each year now going towards the funding of the Missouri State Medical Association be continued, but be diverted into an "educational" fund for the use of the Council, with no more than one-half being used during the year and the other half used for an investment fund. We would have approximately $20,000 a year to use on special projects that are unbudgeted.

Dr. Cope stated that we are in a position in which we have to balance what MSMA is doing against the needs of the society. He indicated that he merely wanted the Councilors to think about this.

It was pointed out that Dr. Chandler had previously mentioned the possibility of having an informal meeting of the Council on Friday evening before the Council Meeting to consider the material to be covered during the Council Meeting. It was indicated that this would be a meeting of the members of the Council only and that staff and guests would not be invited.

The motion was made, seconded and carried that such an informal meeting of the Council be held on Friday evening of the December meeting to formalize Councilor reports and go over Committee reports submitted prior to the meeting and other pertinent matters.

Dr. Chandler stated that the AMA has proposed that state associations and county societies appoint special committees to deal with the "sick doctor" problems. He indicated that "sick doctor" legislation had been introduced in this session of the General Assembly, but that it did not go anywhere. Florida has passed legislation of this type and copies can be made available to those who want them. Dr. Chandler stated that these committees would be established for the purpose of assisting a physician with certain problems. He stated that this probably should be referred to the Public Affairs Commission for study and report back.

Dr. Cope stated that, perhaps, an opinion should be obtained about this matter. He indicated he would like to know from a legal standpoint how much authority this type of committee would have.

Mr. McIntyre said that the "sick doctor" legislation would be a legal situation whereby the Board of Healing Arts could take away a license under certain circumstances and that it was his understanding that the committee proposed by the AMA would try to help the sick physician before he would come before the Board of Healing Arts.

Dr. Chandler stated that Dr. Cope's point was well taken and it did not require any action other than giving it to the legal counsel to report back at the next meeting.

Dr. Chandler stated that he had mentioned earlier about the possibility of having a leadership conference. This conference is provided by the AMA at no cost. Dr. Chandler indicated that, possibly, this could be held in late summer or early fall and would be a meeting for which the Councilors would pick young men who are being groomed for medical leadership to meet in a quiet area and get a "crash course" in what the AMA has to offer. Mr. Mortenson reported that he had contacted Mr. Enright of AMA who arranges these conferences, and he suggested the dates of August 11-12. He stated that the conference would consist of 40 people maximum and would cover topics of parliamentary procedure, the decision making process and the communications process.

Dr. Hetlage stated that he felt this is a very good idea, but he did not see how we could get this conference together by August. Also, there is a conflicting meeting date the same weekend. Mr. Mortenson stated that Mr. Enright also had suggested a date in February, 1974.

Motion was made by Dr. Hetlage that the leadership conference be accepted using the February date. Motion was seconded and carried.

NEXT COUNCIL MEETING

At the invitation of Dr. Cope, the next Council Meeting will be held on September 29-30 at the Ramada Inn in Columbia.

The Council adjourned to an Executive Session.

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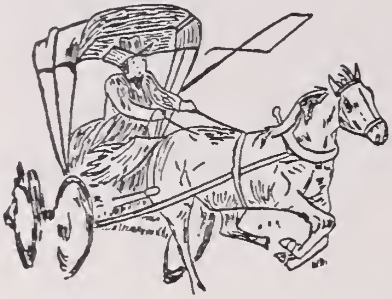
LEO H. POLLOCK, M.D.

Missouri Medicine in Review



FORTY YEARS AGO

Louis C. Boisliniere, M.D., St. Louis, reports: "It is of great interest to the Missouri State Medical Association to know that the first state or federal investigation of silicosis as a health hazard in this country was undertaken in the Joplin district of Southwestern Missouri. It was a matter of common knowledge that there was an unusual amount of consumption among the miners in that district. In 1914, this society petitioned the Surgeon General of the Public Health Service for assistance. In response to this request, Dr. A. J. Lanza, Past Assistant Surgeon, U. S. Public Health Service, together with Mr. Edwin Higgins, Mining Engineer of the Bureau of Mines, launched in 1916 a most complete investigation of the whole subject from every possible angle. The prevalence of silicosis and silicotuberculosis in certain specific industries and occupations throughout the United States is very great, especially among granite workers, sandblasters, miners, excluding coal miners, grinding gravel for roofing and other purposes, in the manufacture of glass and abrasives, pottery makers and other industries where the air contains large quantities of fine powder silica."

An outstanding feature of the 76th Annual Session of the MSMA held in Kansas City on May 1-4 was the Testimonial Dinner tendered by a group of friends of Dr. Arthur Rochford McComas of Sturgeon. This occasion in honor of a Past-President of the Association and Chairman of the Council continuously since 1916, except for the year of his presidency, was planned by a committee of sponsors who believe in honoring those to whom honor is due. Upon completion of 43 years of practice in the community in which he was born and in the territory in which his father, the late Dr. J. M. McComas, was a pioneer physician, Arthur R. McComas lives among friends under blue Missouri skies in an environment that is rich with memories for him.

TWENTY-FIVE YEARS AGO

Editorial: Today, interns and residents, during their medical training period, hear little about the opportunities and advantages of rural practice. Most of them receive their training from medical schools located in cities, from hospitals located in cities and under instructors who are specialists. Such a situation is not conducive to interesting young physicians in rural practice.

Robert Mueller, M.D., St. Louis, President-Elect of the MSMA, comments:

"Missouri medicine with its present scale of activities cannot reduce the state dues under the present $15. Whether one calls it dues and assessment or just plain dues, it is the income that counts. It may be of interest to compare Missouri state dues with those of other states. The dues for Missouri, at present, are $8 and $7 special assessment. The dues of other states are as follows: California, $67; Oklahoma, $47; Wisconsin, $33; Minnesota, $20; South Dakota, $50; Utah, $50; North Dakota, $35; Louisiana, $25; Arizona, $35. Only four states out of 48 have lower state dues than Missouri."

TEN YEARS AGO

The Washington University Medical Alumni Association elected Heinz Haffner, M.D., president-elect, and Robert W. Kelley, M.D., vice-president. Richard V. Bradley, M.D., was reelected as secretary-treasurer.

Newly-elected officers of the St. Louis University Alumni Association are Louis Keller, M.D., president; Hubert A. Ritter, M.D., president-elect; James L. Donahoe, treasurer; and A. M. Ahern, M.D., secretary.

The staff of Bothwell Memorial Hospital in Sedalia reelected Dr. J. W. Boger as chief of staff. Dr. Robert H. Stewart will serve as vice-chief of staff.

In June, a "retirement" dinner was held by the Independence Hospital Nurses' Alumni Association in honor of two brothers, Dr. John R. Green and Dr. Stanley L. Green. Dr. Stanley Green has retired, but Dr. John Green is still in practice.

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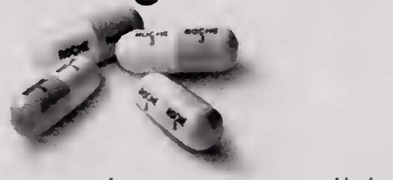

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116th MSMA Annual Session
April 4-7, 1974 Kansas City

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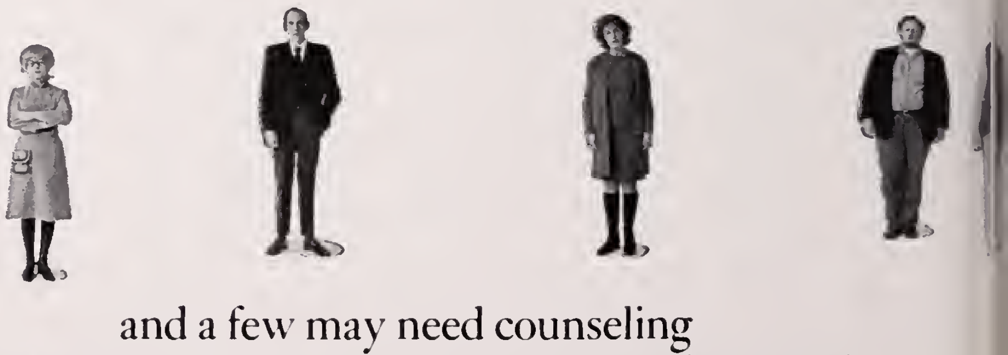

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

Valium®
(diazepam)

To help you manage excessive psychic tension

Must vasodilators and therapy for other diseases come into conflict?

not if the vasodilator is

VASODILAN®

(ISOXSUPRINE HCl)

the compatible vasodilator... no treatment conflicts reported

The cerebral or peripheral vascular disease patient often has coexisting disease[1] which calls for another drug along with his vasodilator. It may be a hypoglycemic, miotic, antihypertensive, diuretic, anticoagulant, corticosteroid, or coronary vasodilator.

Vasodilan is not incompatible with any of these drugs—no treatment conflict has been reported. And, unlike other vasodilators, Vasodilan has not been reported to affect carbohydrate metabolism, liver function, or intraocular pressure—or to complicate treatment of diabetes, hypertension, peptic ulcer, glaucoma, or liver disease.

In fact, there are no known contraindications to the use of Vasodilan in recommended oral doses, other than that it should not be given in the presence of frank arterial bleeding or immediately postpartum.

---

[1] Gertler, M. M., et al.: Geriatrics *25*:134-148 (May) 1970.

Indications: Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.
3. Threatened abortion.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.

Dosage and Administration: 10 to 20 mg. three or four times daily.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Adverse Reactions: On rare occasions, oral administration of the drug has been associated in time with the occurrence of severe rash. When rash appears, the drug should be discontinued. Occasional overdosage effects such as transient palpitation or dizziness are usually controlled by reducing the dose.

Supplied: Tablets, 10 mg.—bottles of 100, 1000, 5000 and Unit Dose; 20 mg.—bottles of 100, 500 and Unit Dose.

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Bobo's back at the big top

After a rheumatoid arthritic flare-up.

Note: This drug is not a simple analgesic. Do
ster casually Carefully evaluate patients be-
g treatment and keep them under close su-
Obtain a detailed history, and complete
d laboratory examination (complete hemo-
alysis, etc.) before prescribing and at fre-
vals thereafter Carefully select patients,
ose responsive to routine measures, contra-
atients or those who cannot be observed fre-
arn patients not to exceed recommended
ort-term relief of severe symptoms with the
ssible dosage is the goal of therapy Dosage
aken with meals or a full glass of milk Sub-
capsules for tablets if dyspeptic symptoms
ents should discontinue the drug and report
y any sign of: fever, sore throat, oral lesions
s of blood dyscrasia); dyspepsia, epigastric
toms of anemia, black or tarry stools or other
of intestinal ulceration or hemorrhage, skin re-
gnificant weight gain or edema A one-week
l is adequate. Discontinue in the absence of a
response. Restrict treatment periods to one
tients over sixty
: Acute gouty arthritis, rheumatoid arthritis,
d spondylitis
cations: Children 14 years or less; senile pa-
ory or symptoms of G.I inflammation or ul-
cluding severe, recurrent or persistent dys-
tory or presence of drug allergy; blood
; renal, hepatic or cardiac dysfunction; hy-
; thyroid disease; systemic edema;
and salivary gland enlargement due to the
myalgia rheumatica and temporal arteritis;
ceiving other potent chemotherapeutic
long-term anticoagulant therapy
Age, weight, dosage, duration of therapy, ex-
concomitant diseases, and concurrent potent
apy affect incidence of toxic reactions Care-
ct and observe the individual patient, espe-
ging (forty years and over) who have
susceptibility to the toxicity of the drug Use
ective dosage Weigh initially unpredictable
ainst potential risk of severe, even fatal, re-
e disease condition itself is unaltered by the
with caution in first trimester of pregnancy

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Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.

and in nursing mothers. Drug may appear in cord blood and breast milk Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G I. tract has occurred The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid) Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination Swelling of ankles or face in patients under sixty may be prevented by reducing dosage If edema occurs in patients over sixty, discontinue drug *Precautions:* The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight, complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc Cases of leukemia have been reported in patients with a history of short- and long-term therapy The majority of these patients were over forty Remember that arthritic-type pains can be the presenting symptom of leukemia
Adverse Reactions: This is a potent drug; its misuse can lead to serious results Review detailed information before beginning therapy Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G I bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement (B)98-146-070-H(10/71)

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

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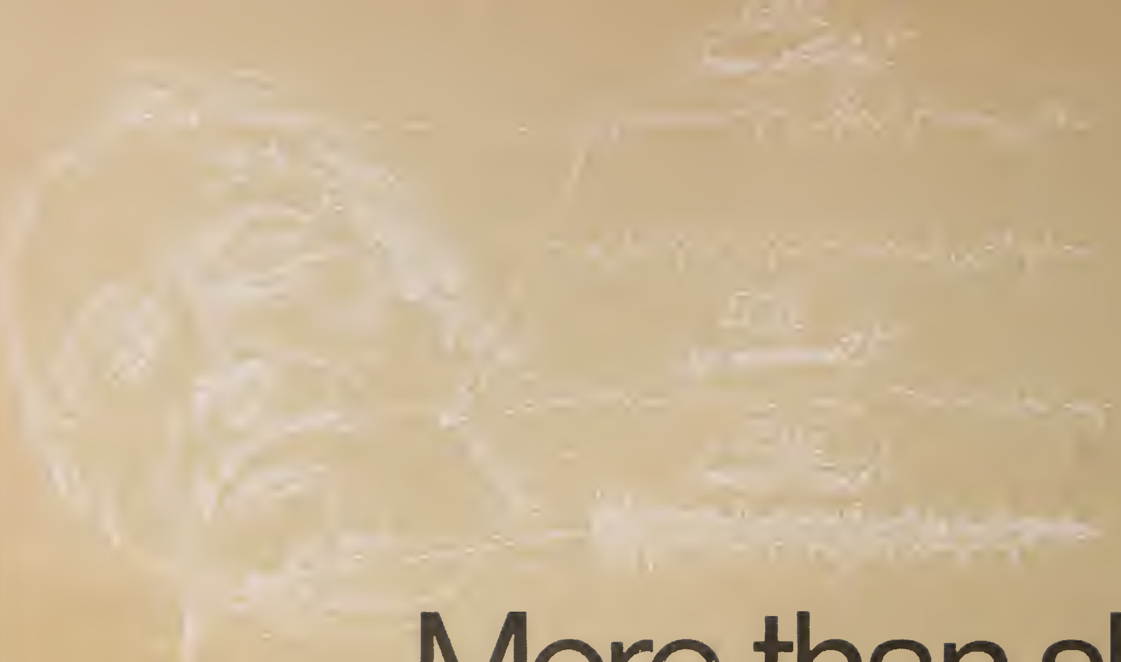

More than sleep

your choice of sleep medication is wisely based on more than sleep-inducing potential

sleep with relative safety

Chronic tolerance studies have confirmed the relative safety of D (flurazepam HCl); no depression of cardiac or respiratory f was noted in patients administered recommended or highe for as long as 90 consecutive nights.

In most instances when adverse reactions were reported, they were mild, infrequent and sel quired discontinuance of therapy. Morning "hang-over" with Dalmane has been relatively infrequen ness, drowsiness, lightheadedness and the like have been the side effects noted most frequently, particularly in the elderly and debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

sleep for 7 to 8 ho without need to repeat dosage

No slee cation has been as rigorously evaluated in the sleep research laboratory as Dalmane. Insomnia given one 30-mg capsule of Dalmane at bedtime, on average: fell asleep within 17 minutes, had fewe time awakenings, spent less time awake after sleep onset, and slept for 7 to 8 hours with no need t dosage during the night.

ep with
nsistency

Dalmane has been shown to be consistently effective even during consecutive nights of administration, with no need to increase dosage.

mane (flurazepam HCl) is a distinctive sleep medication—a
iazepine specifically indicated for insomnia. It is not a bar-
or methaqualone, nor is it related chemically to any other
e hypnotic.

en your evaluation of insomnia indicates the need for a sleep
tion, consider Dalmane—a single entity nonnarcotic, non-
ate agent proved effective and relatively safe for relief of
ia.

DALMANE®
(flurazepam HCl)

When restful sleep is indicated

One 30-mg capsule *h.s.*—usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*—initial dosage for elderly or debilitated patients.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening, in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended

Contraindications: Known hypersensitivity to flurazepam HCl

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage, 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

ROCHE

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Div., Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

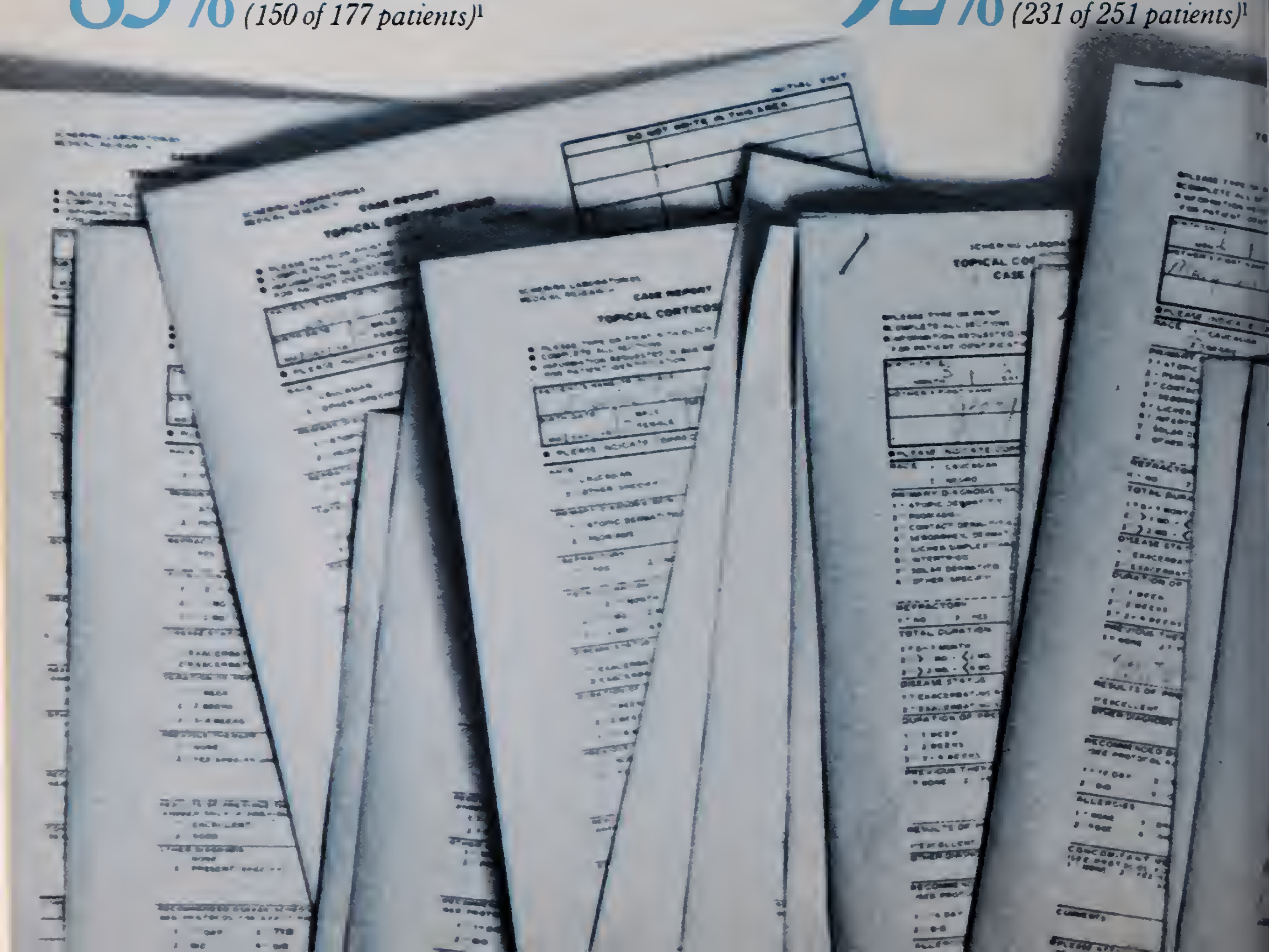
A topical steroid that has clinically succeeded

in study...after study...after study[1-6]

Excellent/good results

85% in psoriasis *(150 of 177 patients)*[1]

92% in atopic ec *(231 of 251 patients)*[1]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CASE REPORT
TOPICAL CORTICOSTEROIDS

Schering

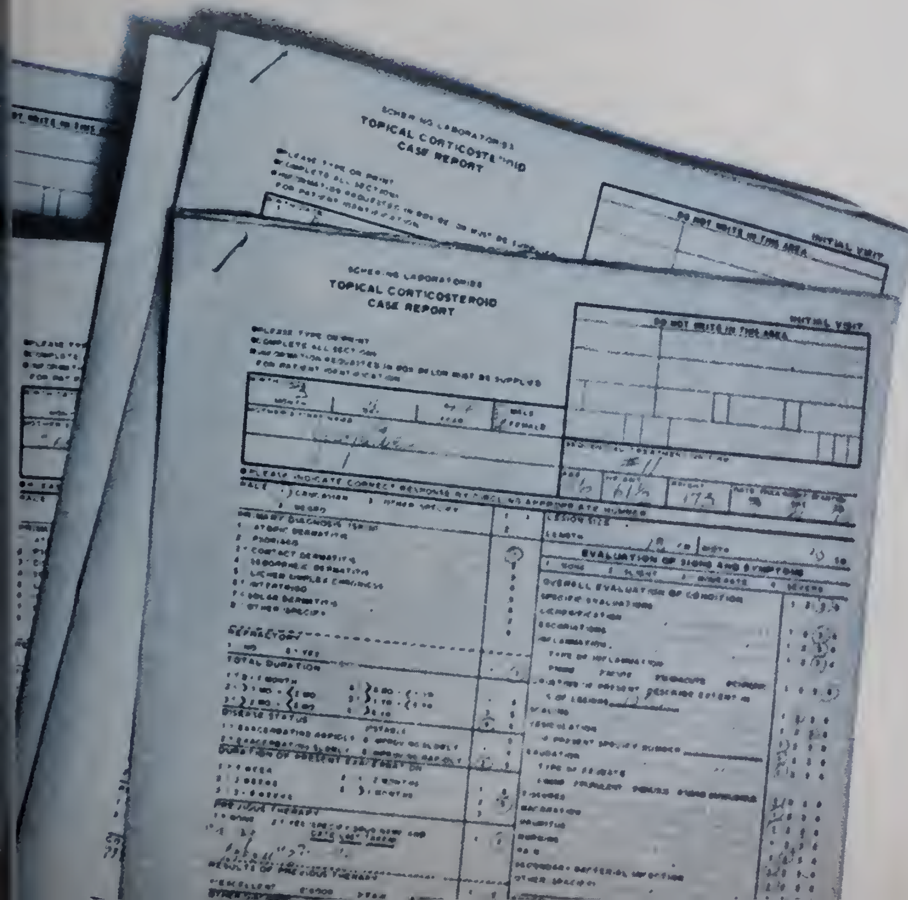
Valisone®

brand of

betamethasone valerate (0.1%) Cream/Ointment

Plus economy *B.i.d. dosage often found effective!*[1]
Available in 5, 15, and 45 Gm. tubes.

6% in contact dermatitis
(81 of 84 patients)[1]



CLINICAL CONSIDERATIONS:

Description VALISONE products contain betamethasone valerate (9-fluoro-11$_\beta$,17,21-trihydroxy-16$_\beta$-methylpregna-1,4-diene-3,20-dione 17-valerate). Each gram of VALISONE Cream 0.1% contains 1.2 mg. betamethasone valerate (equivalent to 1.0 mg. betamethasone in a soft, white, hydrophilic cream of water, mineral oil, petrolatum, polyethylene glycol 1 monocetyl ether, cetostearyl alcohol, monobas sodium phosphate, and phosphoric acid; 4-chloro-m-cresol is present as a preservative. E gram of VALISONE Ointment 0.1% contains 1.2 mg. betamethasone valerate (equivalent to 1.0 mg. betamethasone) in an ointment base o liquid and white petrolatum, and hydrogenate lanolin. VALISONE Cream and Ointment contain no parabens.

Indications VALISONE Cream and Ointment are indicated for the relief of the inflammatory manifestations of corticosteroid responsive dermatoses.

Contraindications VALISONE Cream ar Ointment are contraindicated in vaccinia and varicella. Topical steroids are contraindicated those patients with a history of hypersensitivit to any of the components of the preparation.

Precautions If irritation develops with the use of VALISONE Cream or Ointment, treatment should be discontinued and appropriate therapy instituted. In the presence of an infection, the use of an appropriate antifungal or antibacterial agent should instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled. If extensive areas are treat or if the occlusive technique is used, the possibility exists of increased systemic absorption the corticosteroid and suitable precautions sh be taken. Although topical steroids have not been reported to have an adverse effect on pre nancy, the safety of their use in pregnant fema has not been absolutely established. Therefor they should not be used extensively in pregna patients, in large amounts, or for prolonged periods of time. VALISONE Cream and Ointment are not for ophthalmic use.

Adverse Reactions The following local adverse reactions have been reported with topical corticosteroids: burning, itching, irritation, dryness, folliculitis, hypertrichosis, acneform eruptions, and hypopigmentation. T following may occur more frequently with occlusive dressings than without such therapy maceration of the skin, secondary infection, skin atrophy, striae, and miliaria.

Dosage and Administration Apply a thin film of VALISONE Cream or Ointment to th affected skin areas one to three times a day. Clinical studies of VALISONE have indicated that dosage only once or twice a day is often feasible and effective. AUGUST 1972

For more complete details, consult Scher literature available from your Schering Representative or Professional Services Department, Schering Corporation, Kenilworth, New Jersey 07033.

References: *(1) Files of Headquarters Medical Research Division, Schering Corporation. (2) Carter, V. H., and Noojin, R. O.: Curr. Therap. Res. 9:253, 1967. (3) Falk, M. S.: Cutis 2:788, 1966. (4) Goldblum, R. W.: Pennsylvania Med. 69:50, 1966. (5) Nierman, M. M.: J. Indiana M. A. 10:1184, 1966. (6) Zimmerman, E. H.: Arch. Dermat. 95:514, 1967.*

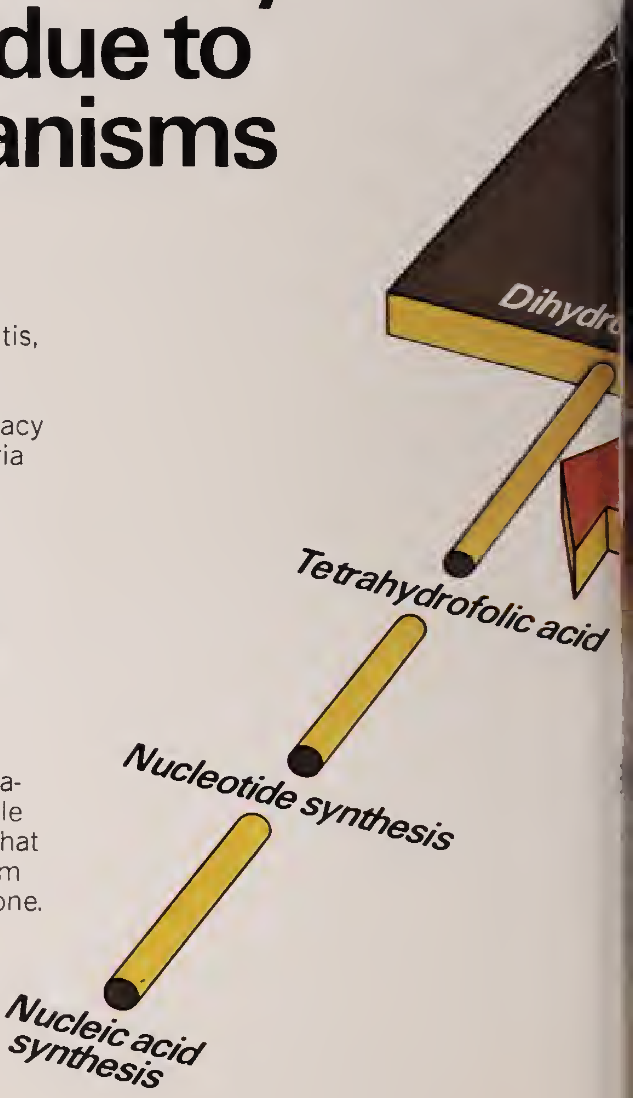
SL

ROCHE announces new BACTRIM™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

a new type of antibacterial for a two-pronged attack against chronic urinary tract infections due to susceptible organisms

Bactrim is highly effective in the treatment of these infections – primarily pyelonephritis, pyelitis and cystitis, when due to susceptible organisms (usually *E. coli, Klebsiella-Enterobacter, Proteus mirabilis,* and, less frequently, indole-positive proteus species). This efficacy is related to the unique mode of action against bacteria (see opposite page), an action that, in effect, makes Bactrim a new type of antibacterial.



Bactrim significantly superior to constituents in patients with obstructive complications

In the presence of obstructive uropathy, Bactrim has demonstrated efficacy which is superior to either sulfamethoxazole or trimethoprim alone against susceptible organisms. In addition, *in vitro** studies have shown that bacterial resistance develops more slowly with Bactrim than with either trimethoprim or sulfamethoxazole alone.

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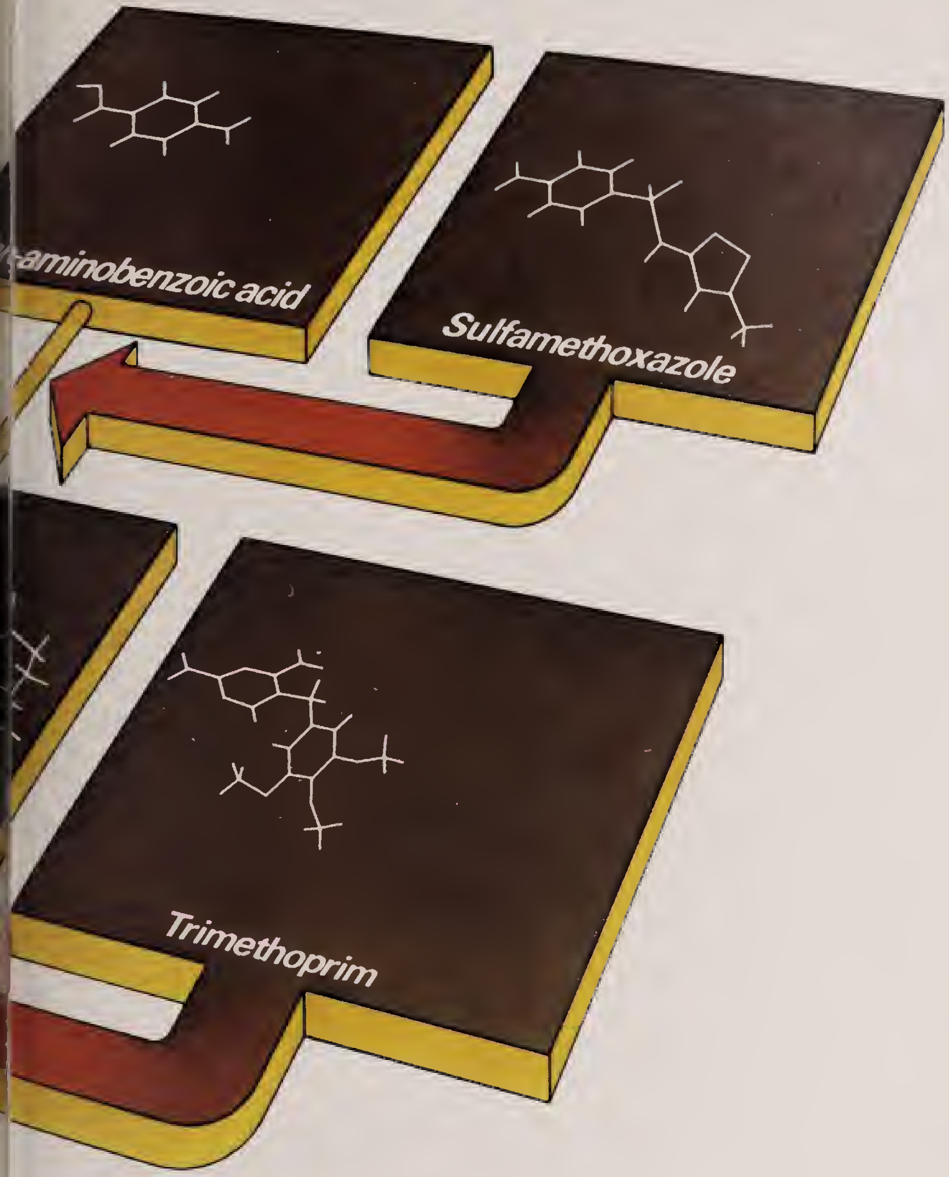
*Please note that clinical conclusions cannot be extrapolated from *in vitro* studies.



ROCHE

errupts life cycle of susceptible bacteria

ue mode of action interrupts the life cycle at two important points, thereby impeding
roduction of nucleic acids and proteins essential to these bacteria. These consecutive
ruptions occur because sulfamethoxazole and trimethoprim resemble naturally existing
trates. By competitive replacement of these substrates, they inhibit further synthesis.

new **BACTRIM**™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

for chronic urinary tract infections

Before prescribing, please see complete product information on last page of advertisement.

Excellent clinical response in chronic urinary tract infections

A multiclinic, double-blind study* of response to a ten-day course of therapy in 471† patients with chronic urinary tract infections demonstrated the superiority of Bactrim. On the 10th day after initiation of therapy, 91.7% (of 168 patients) showed significant bacteriological response to Bactrim compared with 81.2% (of 144 patients) to trimethoprim and 64.5% (of 155 patients) to sulfamethoxazole. In patients with obstructive complications, 10th day response was 94.8% (of 97 patients) to Bactrim, 72.9% (of 85 patients) to trimethoprim and 58.5% (of 94 patients) to sulfamethoxazole.

Excellent response maintained

Bactrim proved equally impressive in maintaining this bacteriological response. In the above study, after ten-day therapy with Bactrim, 68.4% of patients with chronic urinary tract infections maintained response for up to 42 consecutive days, compared with 59.7% with trimethoprim and 44.4% with sulfamethoxazole. In patients with obstruction, 70.8% of those on Bactrim maintained response for up to 42 consecutive days, compared
with 49.4% on trimethoprim and 38.8% on su
methoxazole The figures are particularly rema
able in cases with urinary obstruction—cases
regarded as being notoriously difficult to treat

To date, low incidence of significant side effects

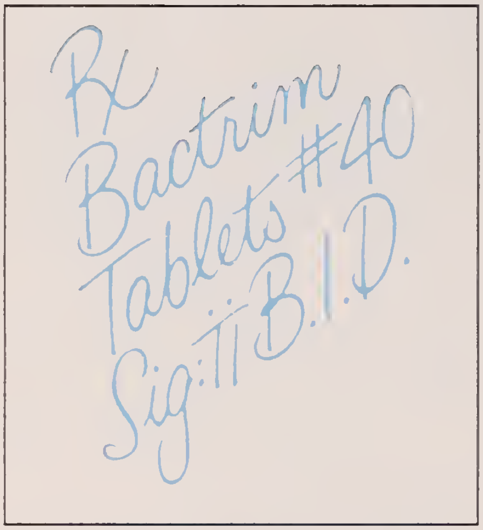
Although Bactrim demonstrated impressive cl
results, it is important to note that the inciden
clinically significant adverse effects was low, m
nausea and/or vomiting, rash, leukopenia, SG
increase and creatinine increase.

Bactrim should be given with caution to patie
with impaired renal or hepatic function, possi
folate deficiency and to those with severe alle
bronchial asthma. Adequate fluid intake must
maintained. Complete blood counts, urinalyse
careful microscopic examination, and renal fu
tion tests should be performed during therapy

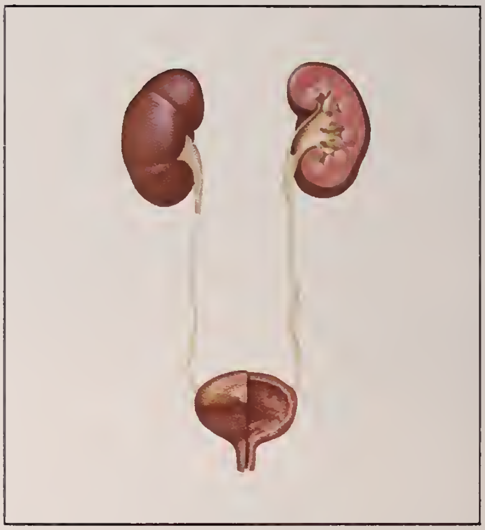
Currently, the increasing frequency of resista
organisms is a limitation of the usefulness of
all antibacterial agents, especially in the treat
of chronic and recurrent urinary tract infectio

Usual adult dosage: two tablets every twelve h
for 10 to 14 days; no loading dose required.

* Data on file, Hoffmann-La Roche Inc., Nutley, N.J. 07
† 4 patients not available for evaluation at day 10.



℞
Bactrim
Tablets #40
Sig: ii B.I.D.



new **BACTRIM**™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

for chronic urinary tract infections

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc
Nutley, N J 07110

Before prescribing, please consult complete product information on facing page.

te Product Information:

tion: Bactrim is a synthetic antibacterial combination prod-
ailable in scored light-green tablets, each containing 80 mg
oprim and 400 mg sulfamethoxazole.

oprim is 2,4-diamino-5-(3,4,5-trimethoxybenzyl) pyrimidine.
/hite to light-yellow, odorless, bitter compound with a molec-
ight of 290.3.

ethoxazole is N^1-(5-methyl-3-isoxazolyl)sulfanilamide. It is
ost white in color, odorless, tasteless compound with a mo-
weight of 253.28.

Microbiology: Sulfamethoxazole inhibits bacterial synthesis
drofolic acid by competing with *para*-aminobenzoic acid.
oprim blocks the production of tetrahydrofolic acid from di-
lic acid by binding to and reversibly inhibiting the required
, dihydrofolate reductase. Thus, Bactrim blocks two con-
e steps in the biosynthesis of nucleic acids and proteins
al to many bacteria.

studies have shown that bacterial resistance develops more
with Bactrim than with trimethoprim or sulfamethoxazole

serial dilution tests have shown that the spectrum of anti-
al activity of Bactrim includes the common urinary tract
ns with the exception of *Pseudomonas aeruginosa*. The fol-
organisms are usually susceptible: *Escherichia coli, Kleb-
nterobacter, Proteus mirabilis* and indole-positive proteus
.

Representative Minimum Inhibitory Concentration Values for Bactrim-Susceptible Organisms
(MIC—mcg/ml)

ia	Trimeth-oprim alone	Sulfameth-oxazole alone	TMP/SMX (1:20) TMP	 SMX
ichia	0.05—1.5	1.0 —245	0.05—0.5	0.95— 9.5
s spp. positive s	0.5 —5.0	7.35 —300	0.05—1.5	0.95—28.5
lis	0.5 —1.5	7.35 — 30	0.05—0.15	0.95— 2.85
lla- bacter	0.15—5.0	0.735—245	0.05—1.5	0.95—28.5

Pharmacology: Bactrim is rapidly absorbed following oral
stration. The blood levels of trimethoprim and sulfamethoxa-
e similar to those achieved when each component is given
Peak blood levels for the individual components occur one
hours after oral administration. The half-lives of sulfameth-
and trimethoprim, 10 and 16 hours respectively, are rela-
ne same regardless of whether these compounds are admin-
as individual components or as Bactrim. Detectable
s of trimethoprim and sulfamethoxazole are present in the
4 hours after drug administration. Free sulfamethoxazole
nethoprim blood levels are proportionately dose-dependent.
eated administration, the steady-state ratio of trimethoprim
methoxazole levels in the blood is about 1:20.

ethoxazole exists in the blood as free, conjugated and pro-
und forms; trimethoprim is present as free, protein-bound
tabolized forms. The free forms are considered to be the
utically active forms. Approximately 44 percent of trimeth-
nd 70 percent of sulfamethoxazole are protein-bound in the
The presence of 10 mg percent sulfamethoxazole in plasma
ses the protein binding of trimethoprim to an insignificant
trimethoprim does not influence the protein binding of
ethoxazole.

on of Bactrim is chiefly by the kidneys through both glomer-
ration and tubular secretion. Urine concentrations of both
ethoxazole and trimethoprim are considerably higher than
concentrations in the blood. When administered together
actrim, neither sulfamethoxazole nor trimethoprim affects
nary excretion pattern of the other.

ons: Chronic urinary tract infections (primarily pyelonephri-
elitis and cystitis) due to susceptible organisms (usually
Klebsiella-Enterobacter, Proteus mirabilis, and, less fre-
, indole-positive proteus species).

***nt note:* Currently, the increasing frequency of resistant organ-
a limitation of the usefulness of all antibacterial agents, espe-
the treatment of chronic and recurrent urinary tract infections.**

ndications: Hypersensitivity to trimethoprim or sulfonamides.
ncy and during the nursing period (see Reproduction
).

gs: Deaths associated with the administration of sulfonamides
een reported from hypersensitivity reactions, agranulocyto-
astic anemia and other blood dyscrasias. Experience with
oprim alone is much more limited, but it has been reported
fere with hematopoiesis in occasional patients. In elderly
s concurrently receiving certain diuretics, primarily thia-
an increased incidence of thrombopenia with purpura has
ported.

The presence of clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts should be done frequently in patients receiving Bactrim. If a significant reduction in the count of any formed blood element is noted, Bactrim should be discontinued.

At the present time, there is insufficient clinical information on the use of Bactrim in infants and children under 12 years of age to recommend its use.

Precautions: Bactrim should be given with caution to patients with impaired renal or hepatic function, to those with possible folate deficiency and to those with severe allergy or bronchial asthma. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis may occur. This reaction is frequently dose-related. Adequate fluid intake must be maintained in order to prevent crystalluria and stone formation. Urinalyses with careful microscopic examination and renal function tests should be performed during therapy, particularly for those patients with impaired renal function.

Adverse Reactions: For completeness, all major reactions to sulfonamides and to trimethoprim are included below, even though they may not have been reported with Bactrim.

Blood dyscrasias: Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia.

Allergic reactions: Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis.

Gastrointestinal reactions: Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis.

C.N.S. reactions: Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness.

Miscellaneous reactions: Drug fever, chills, and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L. E. phenomenon have occurred.

The sulfonamides bear certain chemical similarities to some goitrogens, diuretics (acetazolamide and the thiazides) and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents. Rats appear to be especially susceptible to the goitrogenic effects of sulfonamides, and long-term administration has produced thyroid malignancies in the species.

Dosage and Administration: Not recommended for use in children under 12 years of age.

The usual adult dosage is two tablets every 12 hours for 10 to 14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	2 tablets every 24 hours
Below 15	Use not recommended

How Supplied: Tablets, containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 1000; Prescription Paks of 40, available singly and in trays of 10. Imprint on tablets: ROCHE 50.

Reproduction Studies: In rats, doses of 533 mg/kg sulfamethoxazole or 200 mg/kg trimethoprim produced teratological effects manifested mainly as cleft palates. The highest dose which did not cause cleft palates in rats was 512 mg/kg sulfamethoxazole or 192 mg/kg trimethoprim when administered separately. In two studies in rats, no teratology was observed when 512 mg/kg of sulfamethoxazole was used in combination with 128 mg/kg of trimethoprim. However, in one study, cleft palates were observed in one litter out of 9 when 355 mg/kg of sulfamethoxazole was used in combination with 88 mg/kg of trimethoprim.

In rabbits, trimethoprim administered by intubation from days 8 to 16 of pregnancy at dosages up to 500 mg/kg resulted in higher incidences of dead and resorbed fetuses, particularly at 500 mg/kg. However, there were no significant drug-related teratological effects.

BACTRIM T.M.

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Recommendations[†] on Combination Live Virus Vaccine

American Academy of Pediatrics

Committee on Infectious Diseases

In the September 15, 1971 *AAP Newsletter* sent to Academy members, the Committee on Infectious Diseases of the American Academy of Pediatrics stated its recommendations on the use of combination live virus vaccines. After a careful review of available data, the committee concluded that:

- "This information indicates that the products are both safe and effective when used as directed."
- The vaccine "...can, therefore, be recommended with the obvious advantages of reduction in the number of injections for any given child and a concomitant decrease in the required visits to a physician's office or clinic."

United States Public Health Servi

Advisory Committee on Immunization Practices

In the April 24, 1971 issue of *Morbi*
and Mortality Weekly Report, the Ad
ory Committee on Immunization P
tices of the United States Public He
Service presented recommendations
the use of combination live virus vacci
The committee stated that:

- "Data indicate that antibody respo
to each component of these combina
vaccines is comparable with antibody
sponse to the individual vaccines gi
separately.
- "There is no evidence that
verse reactions to the combi
products occur more f
quently or are more sev
than known reactions to
individual vaccines (see
tinent ACIP recommen
tions).
- "The obvious convenie
of giving already selec
antigens in combined f
should encourage consid
tion of using these produ
when appropriate."

[†] For complete text of both recommendations see your MSD representative or write to Professional Service Dept., Merck Sharp & Dohme, West Point, Pa. 19486.

M-M-R*

(MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE | MSD)

Single-dose vials

M-M-R, given in a single injection, fits easily into your routine immunization program for well babies.

Given at age 12 months, M-M-R provides for vaccina-ion early in life against measles, mumps, and rubella.

MSD suggested immunization schedule for well babies

Age	Vaccine(s)
2 months	DPT (diphtheria-pertussis-tetanus) Oral poliomyelitis vaccine (triple)
3 months	DPT[1]
4 months	DPT Oral poliomyelitis vaccine (triple)
6 months	Oral poliomyelitis vaccine (triple)
12 MONTHS	**M-M-R (MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE, MSD)**

. This vaccination may be given at 3 months, 5 months, or at 6 months, depending on your preference or on the condition of the child.

ince vaccination with a live virus vaccine may depress the results of a tuberculin test for four weeks or longer, the test and he vaccine should not be given during the same office visit.

*Trademark of Merck & Co., Inc.

For a brief summary of prescribing information, please see following page.

M-M-R
(MEASLES, MUMPS AND RUBELL
VIRUS VACCINE, LIVE | MSD)

Single-dose vials

No untoward reactions peculiar to the combination vaccine (M-M-R) have been reported.

Moderate fever (101–102.9 F) occurs occasionally. High fever (over 103 F) occurs less commonly. On rare occasions, children who develop fever may exhibit febrile convulsions. Rash (usually minimal and without generalized distribution) may occur infrequently.

Since clinical experience with measles, mumps, and rubella virus vaccines given individually indicates that very rarely encephalitis and other nervous system reactions have occurred, such reactions may also occur with M-M-R. A cause and effect relationship, however, has not been established.

Excretion of the live attenuated rubella virus from the throat has occurred in the majority of susceptible individuals administered the rubella vaccine. There is no definitive evidence to indicate that such virus is contagious to susceptible persons who are in contact with the vaccinated individuals. Consequently, transmission, while accepted as a theoretical possibility, has not been regarded as a significant risk.

Must not be given to women who are pregnant or who might become pregnant within three months following vaccination.

Contraindications: Pregnancy or possibility of pregnancy within three months following vaccination; infants less than one year old; sensitivity to chicken or duck, chicken or duck eggs or feathers, or neomycin; any febrile respiratory illness or other active febrile infection; active untreated tuberculosis; therapy with ACTH, corticosteroids, irradiation, alkylating agents, or antimetabolites; blood dyscrasias, leukemia, lymphomas of any type, or other malignant neoplasms affecting the bone marrow or lymphatic systems; gamma globulin deficiency, i.e., agammaglobulinemia, hypogammaglobulinemia, and dysgammaglobulinemia.

Precautions: Administer subcutaneously; do not give intravenously. Epinephrine should be available for immediate use should an anaphylactoid reaction occur. Should not be given less than one month before or after immunization with other *live* virus vaccines; vaccination should be deferred for at least six weeks following blood transfusions or administration of more than 0.02 cc immune serum globulin (human) per pound of body weight, or human plasma.

Due caution should be employed in children with a history of febrile convulsions, cerebral injury, or any other condition in which stress due to fever should be avoided. The physician should be alert to the temperature elevation which may occur after vaccination.

Excretion of the live attenuated rubella virus from the throat has occurred in the majority of susceptible individuals administered the rubella vaccine. There is no definitive evidence to indicate that such virus is contagious to susceptible persons who are in contact with the vaccinated individuals. Consequently, transmission, while accepted as a theoretical possibility, has not been regarded as a significant risk.

Attenuated live virus measles and mumps vaccines, given separately, may temporarily depress tuberculin skin sensitivity; therefore, if a tuberculin test is to be done, it should be scheduled before vaccination, to avoid the possibility of a false negative response.

Before reconstitution, refrigerate vaccine at 2–8 C (35.6–46.4 F) and *protect from light*. Use only diluent supplied to reconstitute vaccine. If not used immediately, return reconstituted vaccine to refrigerator at 2–8 C (35.6–46.4 F), and discard after eight hours.

Adverse Reactions: Fever, rash; mild local reacti
such as erythema, induration, tenderness, regio
lymphadenopathy; parotitis; thrombocytopenia
purpura; allergic reactions such as urticaria; arthri
arthralgia, and polyneuritis.

Occasionally, moderate fever (101–102.9 F); less c
monly, high fever (above 103 F); rarely, febrile c
vulsions.

Encephalitis and other nervous system reactions
have occurred very rarely with the individual vacci
may also occur with the combined vaccine.

Transient arthritis, arthralgia, and polyneuritis
features of natural rubella and vary in frequency
severity with age and sex, being greatest in adult
males and least in prepubertal children. Such re
tions have been reported with live attenuated rub
virus vaccines. Symptoms relating to joints (p
swelling, stiffness, etc.) and to peripheral nerves (p
numbness, tingling, etc.) occurring within appr
mately two months after immunization should be c
sidered as possibly vaccine related. Symptoms h
generally been mild and of no more than three d
duration. The incidence in prepubertal children wo
appear to be less than 1% for reactions that wo
interfere with normal activity or necessitate med
attention.

How Supplied: Single-dose vials of lyophilized
cine, containing when reconstituted not less
1,000 $TCID_{50}$ (tissue culture infectious doses)
measles virus vaccine, live, attenuated, 5,000 TCID
mumps virus vaccine, live, and 1,000 $TCID_{50}$ of rub
virus vaccine, live, expressed in terms of the assig
titer of the NIH Reference Measles, Mumps, and
bella Viruses, and approximately 25 mcg neomy
with a disposable syringe containing diluent and fi
with a 25-gauge, ⅝″ needle. Also in boxes of 10 sin
dose vials nested in a pop-out tray with a separate box of 10 diluent-containing syringes.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., INC., *West Point, Pa. 19486*

MSI

MERC
SHAR
DOHN

WARREN A. HEFFRON, M.D., *Albuquerque, N. M.*

Dr. Sappington's Fever Pills

Special Article

"Old Aunt Sallie Elvins was chilling. Elvins went to town and brought home some new medicine—a box of Sappington's pills. Finding Aunt Sallie in the chimney corner, he gave her the box and went to put up his horse. When he returned and asked her if she had taken any of the pills yet, she replied that she had taken all but two and just couldn't get them down. She is said to have reported a complete cure."[1]

Reports such as this gave impetus to one of Saline County's (Missouri) early contributions to both medicine and business. Dr. John Sappington's pills were more than a patent medicine; they were one of the early uses of quinine in medicine for the treatment of the then prevalent malaria fever.

These pills were developed from the experience of Dr. John Sappington who was born into a family of doctors in Maryland in 1776. When John was nine years old, his family moved to a Tennessee farm near what is now Nashville. As a result, young John had little opportunity for a formal education. He served a five-year medical apprenticeship under his father, as was the custom in those days. He later joined his father in practice.

Only a three-year apprenticeship was required at that time for medical school admission. Even though John had no formal education, he had served the apprenticeship under his father and, in 1814-1815, had attended one term of lectures at the Philadelphia Medical College, Philadelphia, Pa. At that time, two terms were required for graduation, but the degree was not compulsory for practice. Dr. Sappington chose not to get the degree.

At the age of 23, he set up his own practice in Williamson County, Tenn. This practice grew and, in 1817, he was financially able to move his family to Howard County in Missouri, eventually settling in Arrow Rock. Until Dr. George Penn became his partner in 1830, Sappington was the only doctor in Saline County.

For much of his practice, he travelled by horseback to patients as far as 65 miles away. Sometimes, Dr. Sappington would stay for several days at a time to personally care for a patient. He carried his medications in his saddlebag. Much of his pay was in the form of salt, beans, corn, wheat and whiskey.

In addition to being the physician of Saline County, he farmed, was a large landowner and owned a blacksmith shop and the pill manufacturing concern.

John Sappington practiced medicine in an era in which there was groping and searching for the treatments of modern medicine without the present day advances in the academic sciences. The only criterion for a successful treatment was whether or not it worked or whether or not the attending physician felt that any untoward effects of the treatment could be offset by its benefits for his patient. At this time, so many physicians were searching, by experimentation on their patients, for cures.

In his practice, Dr. Sappington was somewhat a nonconformist in comparison to most of the other doctors of his day. There were several basic concepts, particularly of fevers, in which Dr. Sappington differed from his colleagues. Many of these beliefs are outlined in his book, *The Theory and Treatment of Fevers.* In this book, he wrote his reasons for departing from the practices of the old-school physicians in the treatment and care of fever. Also, it contains an outline of his treatment for fevers for the general public.

As one of his differences of opinion, Dr. Sappington disagreed with the general theory that fevers were cause of disease and were usually

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This paper was written by the author when he was a student at the University of Missouri School of Medicine in 1960 and was the first place winner in that school's first annual essay contest in medical history. This is its first publication. Dr. Heffron spent his boyhood in Marshall. He is now Assistant Professor, Department of Family and Community Medicine and Director of the Family Practice Program, University of New Mexico School of Medicine.

initiated by excitement or irritation. Most doctors treated fevers primarily by attempting to calm the patient. This was done by purgings, blood letting and emetics. Frequently, a combination of these practices was used. Dr. Sappington felt that fever was a symptom of disease, not a cause. This idea conforms to the modern concept.

Dr. Sappington was a strong opponent of the then prevalent practice of bleeding. Some doctors injudiciously bled their patients of as much as 50 oz of blood. Dr. Sappington felt that this was not only a poor practice, but actually was harmful to the patient. He believed that blood carried oxygen and nutrients to the tissues and that the integrity of this system must be maintained, especially when a disease state was involved, so the body could use its maximum forces to fight off the disease.

Many practitioners seemed shocked when the announcement came that in John Sappington's practice, fever could be controlled by the application of cool water to the skin. He felt that the coolness lowered body temperature and replaced needed fluids, as well as being satisfying to the patient.

Perhaps much of the success of Sappington's treatment of fevers was due to the quinine pills he developed and fearlessly administered during the febrile course of malaria fever. These pills were manufactured at Arrow Rock for about ten cents a box and sold for 15 times that amount. The ingredients were as follows:

Sulfate of Quinine 2 pounds
Pulverized extract of liquerice 1.5 lbs.
Pulverized Gum Myrrh .5 pounds
Oil of Sasafras
Aqua Pura
Makes 240 boxes
24 pills per box

Set of surgical instruments in the Arrow Rock Museum. These tools were owned by Dr. Barrow of Chillicothe and are similar to those used by Dr. Sappington.

The earliest method of administration was to put pulverized quinine bark in wine. However he later used quinine sulfates in his pills.

The current medical opinion of the 1830s was to leave the patient alone during the intermittent phases of the temperature. Dr. Sappington observed a marked improvement in patients when he gave quinine during the afebrile stage. In so doing, he departed from medical tradition. Later, his treatment was substantiated by research which proved that the life cycle of the malarial parasite is in its exoerythrocytic phase during the febrile stage and would be more susceptible to treatment. Of course, he did not have benefit of this research and his reasoning was (1) intermittent stages may not be present in the early stage of the disease, while treatment was necessary; (2) in the later stage of malaria, the patient might not have sufficient strength to endure several febrile phases caused by the physician refraining from treatment. For these reasons, he concluded that it was worth treating patients in a manner contrary to general current medical opinion.

Although this practice did not gain immediate recognition, these quinine pills evidently aided many people. Later writings of such prominent physicians as Daniel Drake and Austin Flint seemed to mention similar convictions.

Flint writes as follows:

"It will be difficult to reconcile this practice with preconceived notions, or any known principles of pathology or therapeutics. Nevertheless, the known virtue which the remedy possesses in intermittent fevers has been only empirically established."[2]

As confidence in the pills and demand increased, he set up his own pill manufacturing company to supply the demand on a large scale basis. With some of the money acquired from this concern, Dr. Sappington established a scholarship fund which still provides annual scholarships for students of Saline County.

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WASHINGTON

In an effort to reach some hard conclusions in the fuzzy area of the impact of various kinds of health insurance on health care, the federal government is starting a $30 million experiment.

Following are some of the questions that researchers hope to answer:

—Would erasure of all financial barriers cause a surge of demand?

—Do deductibles and co-insurance exert a brake on frivolous or excessive use of physicians and hospitals?

—Do families alter their patterns of physician-hospital utilization depending upon their type of insurance? How is their health affected?

The study, handled by the Office of Economic Opportunity (OEO) in conjunction with the Health, Education and Welfare Department, will cover 2,000 families containing about 7,500 people. It will last up to five years. About 100 families in Dayton, Ohio, will be enlisted shortly. Four other cities eventually will take part. The participants' identities are confidential.

The HEW Department is slated to take over the project next year. Noting the proposals before Congress for national health insurance (NHI) programs, the OEO says, "The federal government will inevitably play a major role in determining the way in which the nation's health insurance plans operate. Unfortunately, current knowledge of health economics is not sufficient to predict the effects of public policies related to health insurance."

Those in the experiment will have to give up existing health insurance policies. New ones will be provided free as far as policy cost is concerned. The coverage will take three basic forms:

(1) No deductible; no co-insurance. Basically unlimited free medical care.

(2) $100 yearly per-person deductible, no co-insurance.

(3) No deductible, 20% co-insurance.

There will be variations on these plans, but all will have a catastrophic provision above a certain amount of out-of-pocket costs determined by some fraction of the yearly family income.

Officials concede that Congress may enact a NHI bill before much meaningful data is accumulated from the experiment. Nevertheless, they say, the information will be valuable and could lead to adjustments in any existing national program.

Benefits will vary in the experimental plans. One will cover all visits to physicians' offices while the patients share hospital costs. Psychiatric care will be limited to 50 outpatient visits annually. Dental care will be confined to children and exclude orthodontic work.

Families of all income levels will be included, up to $25,000 a year. All participants will be interviewed in depth; about one third will receive physical examinations.

The experiment is being conducted under a grant to the Rand Corporation, Santa Monica, Calif.; a subcontract for operational work is held by Mathematica, Inc., of Princeton, N. J.

No one will be surprised if some commonly-held notions aren't exploded when the project is finished. A little-publicized HEW study, for example, indicates that average costs per medical visit are much cheaper with the private practitioner than at a neighborhood health center or a prepaid group practice. The estimated private costs ranged from $6.58 to $10.63 by specialties. In contrast, the cost per visit at 18 well-established neighborhood health centers was $21.16. The prepaid group rate was figured at more than $18.

The report, prepared by the office of the Assistant HEW Secretary for Planning and Evaluation, said that strict comparisons among the three modes of delivery are difficult and subject to interpretation, yet "the order of magnitude different was far greater than had been anticipated."

Taking into account all variables, the report said, "When related to the estimated private practice average cost per visit, the (neighborhood) center physician encounter cost appears to be extreme in nature."

On the surface, though the study group took pains not to put it so bluntly, the report indicated that larger delivery systems might not be as efficient and economical as the solo practitioner.

The report concluded:

"Like any analysis, this study raised questions which others must examine and answer. Unfortunately, the luxury of time to answer these questions is not available. As we move through a period of rapid social and health policy change the need for these answers becomes almost immediate."

medical melange

Notes of interest from Here . . . . and Ther

Dr. Donald M. Spencer, Kansas City, was selected as one of two team doctor for the American track and field team which participated in the World Universit Games in Moscow on August 15-25. Dr. Spencer is chairman of the MSMA A Hoc Committee on Medical Aspects of Sports. The American team is sponsore by the United States Collegiate Sports Council and includes NAIA and NCA athletes.

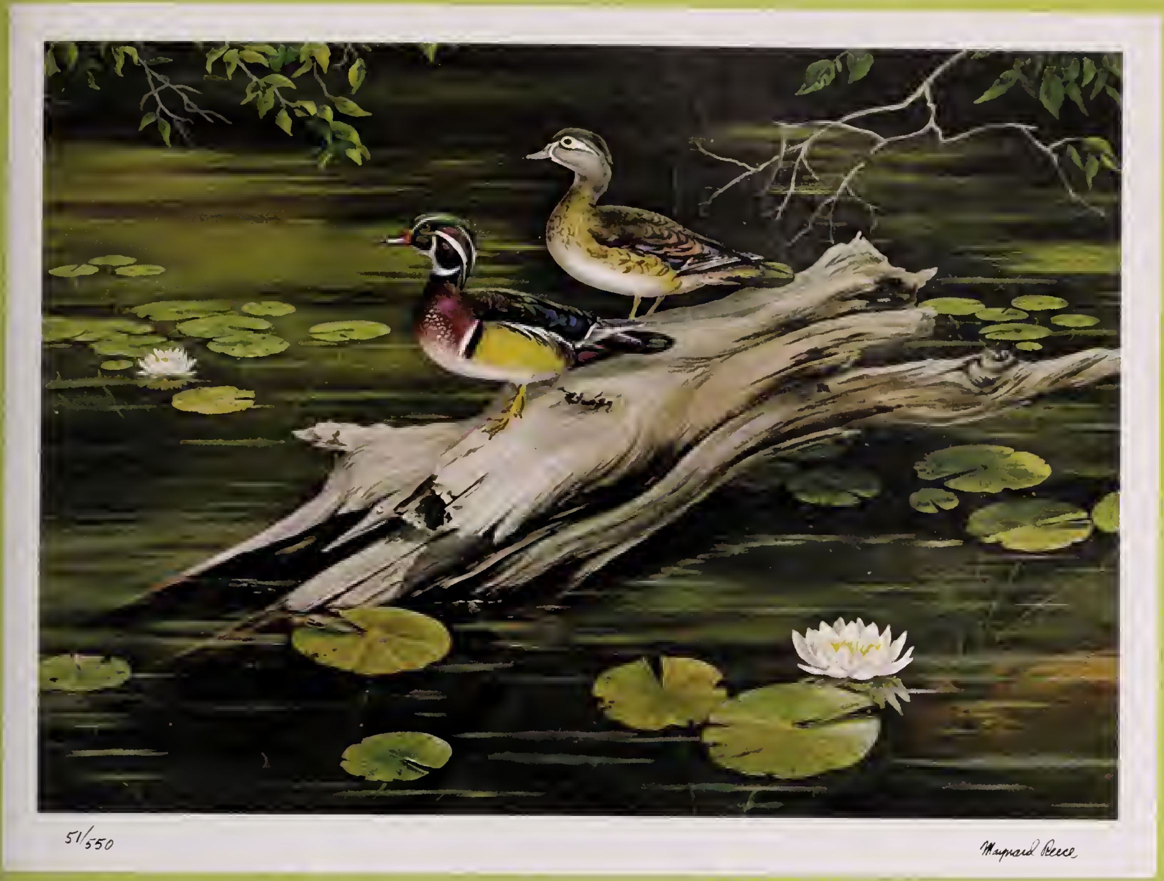
Dr. R. Lee Cooper of Warrensburg, a Vice-President of the MSMA, received a special award at a banquet celebrating the tenth anniversary of the Johnson County Memorial Hospital on August 3. He received a plaque and was cited as a lifelong member of the community who has been a most prominent figure in the medical and civic community. **Mr. Howard Baldwin**, a member of the Board of Trustees, also read a letter from **Gov. Christopher S. Bond** citing Dr. Cooper's contribution to the community. **Dr. A. L. Folkner** was master of ceremonies for the occasion which was attended by more than 200 persons. Dr. Cooper's son, **Dr. Robert L. Cooper II**, and his son-in-law, **Dr. Hugh Hanna**, also practice medicine in Warrensburg.

Dr. Arnold M. Reeve has been appointed health officer of District One of th Missouri Division of Health and assumed his duties on July 23. This announc ment was made by **Dr. Herbert R. Domke**, state director of the Division. D Reeve formerly was Commissioner of Public Health in Iowa.

Dr. F. T. H'Doubler, Past Potentate of Abou Ben Adhem Temple in Springfield, was elected Imperial Marshal of the Shrine of North America at the 99th Imperial Council Session of the international organization in July. The 900,000-member fraternal and philanthropic organization is observing its 101st year and marking the 51st year of operating Shriners Hospitals for Crippled Children. Free medical treatment is given at the hospitals to children under 15 without regard to race or creed. Dr. H'Doubler is in practice in Springfield with his brother, **Dr. Charles E. H'Doubler.**

Dr. Albert L. Carlin, who has practiced medicine in Stanberry since 1952, wa honored before hundreds of persons attending that community's 42nd annua July 4th celebration. He received a plaque as an award of appreciation from th citizens of Stanberry for his outstanding and dedicated service.

Dr. Donald R. Patterson of Joplin was named Green Country Chapter chairman of the 1973 Multiple Sclerosis Fund Drive held in the Joplin area in August.



y these beautiful wood ducks in your home or office

"It's a thrilling sight to see the handsome drake wood duck standing quietly on a gnarled log with his mate. Because of the wood ducks' preference for secluded timber areas near or in the water, they enjoy quiet, shaded ponds. These spots are ideal for the fragrant water lily. The lily pads floating on the clear water seem suspended in midair. Overhanging boughs add to the privacy of this dark hideaway. Wood ducks are adept at swift flight in heavy timber, darting and twisting with ease through a heavy tangle of trees."

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ard Reece at work on *Feeding e—Canada Geese*. Lithograph ductions in eight colors of this nt painting are now available. Plate size, 19″ x 25″ with ample margins. $75 each.

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in Brief

A summary of AMA, medical & health news

American Medical Association / 535 North Dearborn Street / Chicago, Illinois 60610 / Phone (312) 527-1500 / TWX 910-221-0300

The concept of an NHI plan relating benefits to income was suggested by the Brookings Institution, Washington, D. C. In a report, the Institution said, "The type of proposal that seems best adapted to meeting all three criteria of equity, protection and efficiency is a national health plan with income-related benefits." One of the major features of the AMA's Medicredit proposal is the income tie-in, which is not considered in the Kennedy-Griffiths NHI bill. A catastrophic program based on tax credits which would concentrate tax benefits on those for whom health care expenses pose the most serious problem was also suggested in the report. For copies of the report, *Setting National Priorities*, $3.95 each, write to Brookings Institution, 1775 Massachusetts Ave., Washington, D. C. 20036.

Costs per visit to private practitioners are lower than those to neighborhood health centers or prepaid group practices, reports an HEW study. The cost per visit at the 18 health centers studied was $21.16. OEO supported centers reflected a cost of $23.68 and those supported under the Public Health Service Act a cost of $18.60, while prepaid group rates averaged more than $18. Costs per visit to private physicians in the four primary care specialties ranged from $6.58 to $10.63.

A $25,000 contract from HEW has been granted to the AMA for the preparation of a report on professional health provider participation in the Early and Periodic Screening, Diagnosis and Treatment Program for children under Medicaid. The AMA's Committee on Health Care of the Poor will sponsor national, state and local meetings to develop solutions to EPSDT problems.

An updated version of the *JCAH Accreditation Manual for Hospitals* is available. It contains three new sections of standards, new survey eligibility criteria and other standards changes that will become effective in January, 1974. All changes made since the 1970 edition of the *Manual* are incorporated in the new soft-cover edition. For copies, $3.50 each and $3.00 each for six or more, write to Publications Coordinator, JCAH Headquarters, 875 N. Michigan Ave., Chicago, Ill. 60611.

A $30-million project to determine the impact of NHI on medical care cost and availability will be conducted by the Office of Economic Opportunity. Initially, 150 families in Dayton, Ohio, will be enrolled in three different health plans to determine how out-of-pocket payments influence the amount of care they seek. Next year, the program will be enlarged to include about 600 families in Dayton and will be extended to include 2,300 families in four cities within two years.

After expressing dissatisfaction with their closed-panel Kaiser Foundation health care plan, several Teamsters locals in the Los Angeles area adopted a private-physician, fee-for-service plan developed by the Los Angeles County Medical Association. It provides comprehensive medical care and hospitalization for 10,000 union members and their dependents. Plan members choose their own physicians and hospitals, who maintain their freedom to practice privately and bill for services in the usual way. Bills are submitted to the Los Angeles County Health Services Corp., a nonprofit subsidiary of LACMA.

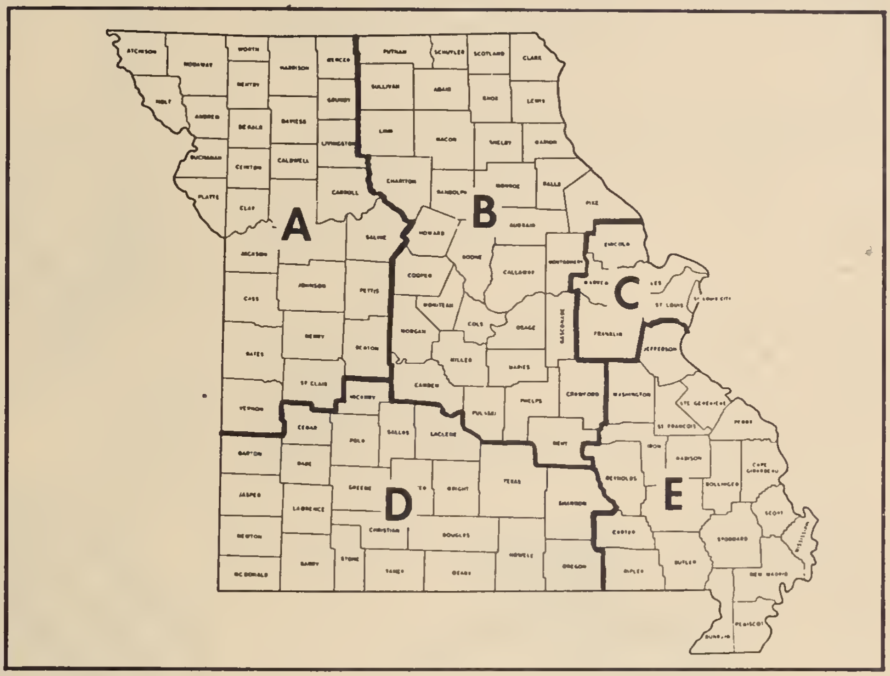
Current Procedural Terminology is now available on microfiche and magnetic computer tapes and in book form. *CPT* on microfiche, designed for use in microreaders, costs $2. Two sets of magnetic computer tapes are being offered. The first, containing codes and procedural descriptions which correspond with those in the book, costs $625. The second, costing $385, contains descriptions suitable for computer billing. The book version is available for $5. To order the book (OP-41), microfiche (OP-41A), or magnetic computer tapes (OP-41B and OP-41C), write to Order Dept., AMA Headquarters.

Five M.D.'s have been named to the 17-member CLC Health Industry Advisory Committee. Physicians on the committee are Ernest B. Howard, M.D., the AMA's executive vice president; Earl W. Brian, M.D., secretary, California Health and Welfare Agency; Leonard W. Cronkhite, Jr., M.D., executive vice president, Children's Hospital Medical Center, Boston; Paul M. Ellwood, Jr., M.D., executive director, American Rehabilitation Foundation, and Kenneth W. Woodward, M.D., executive director, Rochester (N. Y.) Health Network.

MSMA NEWS ROUND-UP

SEPTEMBER, 1973

CF proposed as PSRO in state!



Proposed Missouri PSRO's

Five areas in Missouri which closely coincide with present Health Care Foundation of Missouri Peer Review Regions were proposed as PSRO areas at a District 7 HEW meeting Aug. 27. Each area would be a PSRO while the HCF would become an administrative agency for all the areas. See story for slight revisions in Region alignment.

proposal which would estab- the Health Care Foundation Missouri as the "umbrella" O in Missouri and desig- the HCF's current five Review Regions as PSRO s received wide support at rict VII HEW meeting in erson City.

lector W. Benoit, Jr., M.D., ansas City, chairman of the lth Care Foundation, capsul- the Foundation's recommen- ons as follows:

1. That the five PSRO s as defined by the Health Foundation of Missouri, and ch represent what the li- ed practicing physicians nselves regard as the most vi- medical service areas in Mis- i, be so designated for the e of Missouri; and that it is specific intent that each O within these areas be so gnated, be administratively ed to each other and the Pro- onal Standards Review ncil (PSRC) through the lth Care Foundation of Mis- i by establishing a Missouri essional Standards Adminis- ve Organization (PSAO).

2. That the Health Care dation of Missouri, with its blished provider relation- s, and its regionalized administrative review anism be designated as the Professional Stan- s Administrative Organization (PSAO) for ouri.

3. To further demonstrate the Health Care dation's sensitivity to the problems involved stablishing the necessary PSRO structures, HCF is willing to accept alternatively, if the etary of HEW designates, full statewide respon- ity of all PSRO performance by becoming the contractor with HEW for the State of Missouri and implementing the intent of PL 92-603."

Dr. Benoit stated the HCF not only recognizes the need for a decentralized review structure that localizes review activities and responsibilities, but also recognizes the absolute need for a statewide coordinating and administrative organization that will complement and assist in the development of each PSRO as it relates to all health care interests within its area and the state.

"Since it appears to be the intent of PL 92-603

Continued on Next Page

PSRO's must be designated by Jan. 1, 1974

Continued from Previous Page

to establish one review organization in each geographically-defined medical service area and Missouri is able to accommodate five such areas," explained Dr. Benoit, "it becomes immediately apparent to all concerned that as a result of the legislation which is an attempt to reduce medical costs, it is possible the problems will be multiplied and the costs increased if each PSRO area attempts to develop its own independent and unrelated administrative mechanism."

By establishing the HCF as the Missouri Professional Standards Administrative Organization, said Dr. Benoit, the effectiveness and efficiency of the review work done in each PSRO area is vastly enhanced by eliminating duplicative organizational and administrative functions of each of the five areas. Also, centralizing the areas into one PSAO system would provide maximum utilization of resources within an integrated local and statewide framework.

Dr. Benoit added that the PSAO would become the primary communicator between each PSRO and the Missouri PSRC, as well as other governmental and intermediary interests.

The HCF proposal included minor changes in the makeup of current HCF Peer Review Regions. The changes transfer Linn County from Area A to Area B; Maries, Pulaski, Phelps, Dent and Crawford Counties would transfer from Area D to Area B; Carter County would move from Area D to Area E and Jefferson County would shift from Area C to Area E.

Those organizations on hand at the Regional HEW meeting to testify in favor of the HCF proposal included the Missouri State Medical Association, Missouri Association of Osteopathic Physicians and Surgeons, Southeast Missouri Foundation for Medical Care, representatives from each HCF Peer Review Region and the Missouri Podiatry Association.

Each spokesman from the various HCF Regions requested that his Region be designated as a PSRO area. The spokesmen also supported the HCF as a statewide coordinating agency.

John I. Matthews, M.D., secretary of the Missouri State Medical Association, told HEW o cials that the MSMA House of Delegates in 1 directed the Council to implement a mechanism peer review throughout the state. Acting conjoin with the Missouri Osteopathic Association, Health Care Foundation of Missouri was establis and "is the only recognized statewide peer rev organization in Missouri."

Dr. Matthews added that just last March House of Delegates adopted the following reso tion:

"That endorsement be given to the Health C Foundation of Missouri in its efforts to become responsible agency for PSRO activities in Miss ri."

PSRO Conference scheduled

A PSRO Regional Conference, sponsored by the AMA, will be held Sept. 28-29 in Chicago. The program will not be finalized until the latest possible date so that new developments in PSRO can be included.

The program is expected to include "How To" workshops on many aspects of PSRO's.

For further information, contact Martin G. Dale, Peer Review Activities, AMA, 535 N. Dearborn St., Chicago, Ill. 60610.

"The proposal by the HCF," said Dr. Matthe "appears to fulfill in every respect the PSRO a designation guidelines developed by the Departm of HEW."

Presenting testimony for the HCF Regi were Allen D. Smith, Kansas City, Region A; R ert E. Bregant, M.D., Jefferson City, Regional Richard V. Bradley, M.D., St. Louis, Region M. D. Bonebrake, M.D., Springfield, Region and Edwin K. Burford, M.D., Cape Girardeau, gion E and the Southeast Missouri Foundation Medical Care.

'M.D. Day' at Mizzou set Oct. 12 - 13

October 12 and 13 have been designated for the 14th annual "M.D. Day" activities at the University of Missouri-Columbia.

A scientific session on Friday, Oct. 12, is designed to bring recent medical knowledge to practicing physicians in the fields of pediatrics, obstetrics-gynecology, gastroenterology, and rheumatoid arthritis. The faculty for the morning and afternoon sessions has been selected from specialists at both the University of Nebraska and UMC medical schools.

Reservations for M.D. Day are being handled through the Office of Continuing Education for the Health Professions, University of Missouri Medical Center.

M. Pinson Neal, M.D. noted professor, dies at 85

M. Pinson Neal, M.D., Professor Emeritus Pathology at the University of Missouri-Colum School of Medicine, died Aug. 19 at the age of 85

A noted teacher and medical author, Dr. N was an active member in the Missouri State Me cal Association and served as Vice President 1957-58.

A Dr. M. Pinson Neal Memorial Fund has be established at the University of Missouri Medi Center.

MSMA Council to meet

The Council of the Missouri State Medi Association will meet Sept. 29-30 at the R mada Inn in Columbia.

Just what do you get for your AMA dues?

You get a package of personal and professional services and benefits you've probably never been fully aware of.

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You get a comprehensive medical library to help you do your research. An editing service for your articles. Information and reports on medical and health subjects from any AMA department.

You get publications to keep you abreast of medical and health developments. *JAMA*. *American Medical News*. And *Prism*, the new socioeconomic journal.

You get the Physician's Placement Service to help you find a place to practice or locate an associate. And if you're a resident winding up your training, there's a special workshop to help prepare you for setting up your practice.

All these are just a few of a broad spectrum of benefits and services you get for your dues. But even more important, you get a strong and effective national spokesman to represent you, your interests and your views.

Join us.
We can do much more together.
American Medical Association
535 N. Dearborn St./Chicago, Ill. 60610

Opinion & Dialogue

"Prescription drugs – who should determine the maker?"

Dispenser of Medicine

Clifton J. Latiolais
President
American Pharmaceutical Association

"Too many doctors are indi
ent to the economic consequenc
their decisions." So stated a rece
issue of *Medical News Report* (D
cember 4, 1972), an independer
weekly newsletter published by f
AMA Chief Executive F. J. L. Blas
game, M.D.

Doctor, are you indifferent . . . ?

In discussing an anticipate
crease in Blue Shield rates, Dr. B
ingame's newsletter had this to s

"In general, it can be said,
have given the impression they a
not particularly concerned with t
increase in cost of health care to
patients . . .

"True, an MD's training is p
marily scientific, but in the real v
of practice, all of his scientific de
sions have a price tag, or an ecor
impact. The economics of health
beckon the practitioner's attenti
Concern for economics of medic

Maker of Medicine

C. Joseph Stetler
President
Pharmaceutical Manufacturers Association

When the pharmacist recor
mends that a drug product other
the one ordered be dispensed, th
prescriber invariably permits the
change when he feels the best in
ests of the patient will be served

Shortcomings of Pro-Substitutio
Argument

The fact remains that it is n
sary for the prescriber to know th
the change is being contemplate
and to be in a position to consen
demur. Without that opportunity
unilateral decision of the pharm
made in the absence of clinical k
edge of the patient, could expos
to needless risks, and in additior
jeopardize the relationship betw
the professions of Pharmacy anc
Medicine. In my view, there is nc
in the pro-substitution argument
offsets these risks.

The Issue of Drug Knowledge

Substitution advocates cla
that the primary justification for
changing the rules is the desire
better utilize pharmacists' know
about drugs. Yet the pharmacist
task to keep current on the entir
field of drug therapy, to some de
puts him at a disadvantage. Mos
often, a practicing physician wil
expert knowledge of no more th

Advertisement

d be an obligation of medical
ice...
"Medical societies ought to con-
continuing campaigns to point
e substantial savings that could
alized thru deductible insurance
rotection for catastrophic ill-
At the very least, they should, in
atients' interest, question the
s of any insurance organization
aises health care costs by forc-
licyholders to buy insurance
nay not need or want and prob-
von't ever use.
'Too many doctors are indiffer-
the economic consequences of
decisions. Too many, for ex-
, habitually hospitalize patients
convenience of the MD. It's
nse to deny such habits exist...
'Doctors, thru their medical so-
s, have unhesitatingly appealed
ir patients for support in the
against government interference
e private practice of medicine.
e public in the past has re-
ed. It's time the American Med-
ssociation and state and local
al societies paid off the debt by
ve action to hold down the cost
dical care."

f Drugs

nsurance rates and hospital
es are only two factors in health care costs. The cost of drugs—both prescription and nonprescription—is another.

And when it comes to drug costs, the nation's pharmacists *are concerned*. Through their national professional society, the American Pharmaceutical Association, pharmacists are advising the public to use nonprescription medication cautiously and conservatively, and to seek the advice of their pharmacist before selecting or purchasing such drugs.

Outdated Laws

The pharmacist also is aware that when it comes to prescription drugs, often he has an even greater opportunity to reduce the cost to the patient—with no sacrifice in the quality of the medication dispensed. But in many states, outdated and antiquated laws prevent the pharmacist from engaging in drug product selection. "Drug product selection" simply means that the pharmacist functions in the patient's interest by consciously choosing, from the multiple brands available, a low-cost quality brand of the specific drug to be dispensed in response to the physician's prescription order.

Much *misinformation* has been purposely spread by those who stand to gain financially by maintaining high drug costs to the public. An endless stream of propaganda has emanated from the drug industry in an effort to persuade the medical profession that these so-called anti-substitution laws should be retained. And as long as these laws are retained, the drug industry will continue its current marketing practices which contribute unnecessarily to high drug costs to patients. These practices also are inviting government agencies to expand their restrictive controls on physicians and pharmacists.

APhA Efforts

As pharmacists, we are concerned about health care costs. We hope that every physician shares our concern on this vital issue, and will give his personal support to the constructive efforts APhA has undertaken in the interest of all patients.

(For a complete discussion of drug product selection, you are invited to request a free copy of the "White Paper on the Pharmacist's Role in Product Selection" from: American Pharmaceutical Association, 2215 Constitution Avenue, N.W., Washington, D.C. 20037.)

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drugs that he selects to treat the
ity of conditions encountered in
actice. Moreover, the physi-
choice of a specific brand is
on his knowledge of the pa-
medical history and current
ion, and his experiences with
rticular manufacturer's
ct.
ome substitution proponents
rgued that the dispensing of a
iption is a simple two-party
ction between the pharmacist
e patient, and that a substitut-
armacist may avoid even a
cal breach of contract by simply
ng the patient that he is making
ostitution. I would judge that
urts would be sympathetic
a pharmacist who substituted
t physician approval and who
ook a legal defense that seeks
e the patient responsible for
armacist's actions.

d Prescription Prices?

ubstitution advocates are
ting to the consumer, and par-
y the consumer activist, that
d prescription prices could
egalization of substitution.
e seen absolutely no evidence
fy this claim. To the contrary,
nce in Alberta, Canada, where
ution is authorized, suggests the opposite.

Many pharmacists understandably are concerned about the cost of maintaining multiple stocks of similar products. While there is no doubt that inventory costs rise when additional brands are stocked, it would be interesting to know how much they rise, and how many pharmacists actually stock *all* brands—of, say, ampicillin or tetracycline—or how long they keep "slow moving" products on their shelves before they are returned for credit. To ask that the industry eliminate multiple sources is to ask competitors to stop competing.

Drug Substitution—A License for the Unethical

Anti-substitution repeal would favor "corner cutting" pharmacists and manufacturers. For them, free substitution would be not a right, but a license. As an aftermath, it is quite likely that the confidence of both physicians and patients in the profession of Pharmacy would be eroded, as revelations about the unconscionable behavior of an undisciplined few were magnified in the press or in professional circles.

Summary

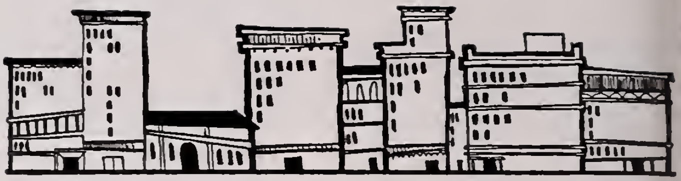
In short, what the American Pharmaceutical Association advocates as a broad-spectrum panacea looks to us to be not only a minority view (advocacy of substitution is by no means a uniform policy in Pharmacy), but also an extraordinarily costly and ineffective remedy, whose side effects are odious. We believe (1) that an impressive majority of pharmacists prefer to work with Medicine and with industry, for the consumer, and for the general good, (2) that they seek the privilege to substitute when the patient might gain and when the patient's doctor agrees, and (3) that they seek to work for the resolution of genuine grievances openly and professionally.

(For amplification of PMA views, please write for our booklet, "The Medications Physicians Prescribe: Who Shall Determine the Source?" It is available from: Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.)

*Pharmaceutical
Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005*

P·M·A

From the Medical Schools

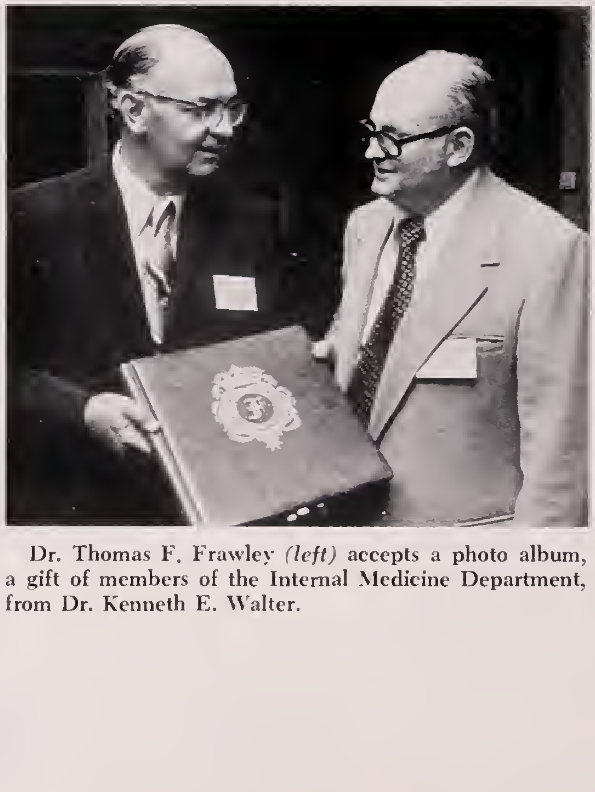


ST. LOUIS UNIVERSITY

Recognition Night for *Dr. Thomas F. Frawley,* professor and chairman of the Department of Internal Medicine at the St. Louis University School of Medicine, was sponsored by full-time members of his department on July 12 at a dinner at the Bath and Tennis Club. Dr. Frawley, a camera enthusiast, was the recipient of a photo album.

Dr. Kenneth E. Walter, associate professor of internal medicine and director of the Cardiac Catheterization Laboratory at the St. Louis Veterans Administration Hospitals, was chairman of the arrangements committee. He presented the album which will be used for photos taken at the dinner.

Rev. Edward J. Drummond, S.J., vice-president for the Medical Center, delivered the invocation at the dinner. *Dr. Robert H. Felix,* dean, School of Medicine, was the keynote banquet speaker. *Dr. George E. Thoma,* assistant vice-president for the Medical Center, and *Dr. Richard J. Dames,* assistant dean, both of whom are members of the Internal Medicine Department, were among the 70 physicians and wives who attended.



Dr. Thomas F. Frawley *(left)* accepts a photo album, a gift of members of the Internal Medicine Department, from Dr. Kenneth E. Walter.

Dr. Frawley, who served as chairman of the Department of Internal Medicine for ten years, had requested to leave that post on Sept. 1, 1973 to devote full time to teaching, research, patients and writing. He will continue to serve as professor of internal medicine and head of the Section of Endocrinology. Dr. Frawley also will play a key role in the planning and development of a special Diagnostic and Treatment Center at the St. Louis Veterans Administration Hospital. This Center will be especially supportive to studies on endocrine and metabolic problems relating to alcoholism, drug abuse and aging. The St. Louis Veterans Administration Hospital is affiliated with St. Louis University.

Richard L. Stensrud, director of the St. Louis University Hospitals, announced two administrative promotions July 1.

Ronald W. Green, who has served as assistant director at the University Hospitals since July 1, 1972, has been named associate director. Green had been administrative assistant from June of 1971 to July of 1972. He is an instructor in Hospital and Health Care in the University's Graduate School.

Stanley J. Kantanie assumed Green's former post as assistant director of the St. Louis University Hospitals. He has been administrative assistant for ancillary services since June of 1972.

The St. Louis University Hospitals Auxiliary, which pledged $100,000 to the University Hospitals four years ago, went over the top when the group recently presented Richard L. Stensrud, director, St. Louis University Hospitals, with a check for $35,000. This brought total contributions for the four-year period to $128,000.

The Auxiliary's gift can be applied to the University's Danforth Challenge grant of $20 million. The University has accepted the challenge to earn the grant by matching it with like amounts of private gifts over the next five years.

NIVERSITY OF MISSOURI-COLUMBIA

Approximately 85 new interns and residents ined the Medical Center and VA Hospital staff n July 1. Added to the more than 100 physicians lready on duty, they comprise the house staff f the two affiliated hospitals.

These doctors are taking specialty training in 1 medical fields under the direction of the nior faculty members. The specialties range om anesthesiology to urology. In addition, the edical Center has 15 postdoctoral fellows in ecial research training.

A significant increase is noted this year in the umber of residents in Family Practice (six first-ear and two second-year residents) following national trend toward interest in the "family octor." The new doctors receive training in the amily Medical Care Center here as well as in e hospital.

Another upward trend shows in the increase interns and residents in Pediatrics, although e overall increase in the number of house staff n generally be attributed to the opening of ore beds at the Veterans Administration Hostal. All teaching and training programs there e under the supervision of the faculty of the hool of Medicine.

In the Department of Medicine, a new subvision has been added this year to provide aining in treatment of pulmonary diseases. r. *Kaye Kilburn* is the new chief of the Dision, having come to Missouri from Duke Unirsity. The two residents who will train with m are coming from the East. However, most the new residents are from the midsection of e nation.

Eighteen Missouri medical graduates of 1973 e staying here for their internships. Also, a ge number of graduates who have been away r internships and military service returned this ar to their Alma Mater.

A $240,000 grant from the State Office of Votional Rehabilitation provides for staffing the cHaney Rehabilitation Center after completion construction here.

The building, which is adjacent to the Medical nter on the east and connected to the hospital by an underground passageway, is currently being enlarged to accommodate about 600 inpatients and outpatients a month. The new area will provide treatment facilities for physical therapy, occupational therapy, hearing and aural rehabilitation, prosthetics and orthotics and vocational rehabilitation. The six-story addition is expected to be completed in February, 1974.

Dr. Charles R. Peterson, new chairman of the Department of Physical Medicine and Rehabilitation, has arrived in Columbia and has assumed his new responsibilities. Granting of the funds will allow him to proceed in recruiting new faculty members and others.

WASHINGTON UNIVERSITY

Thomas B. Ferguson, M.D., professor of clinical cardiothoracic surgery, has been elected by the part-time faculty of Washington University School of Medicine as its representative to the Executive Faculty, the Medical School's governing body. Dr. Ferguson will serve as a voting member for a one-year term.

Dr. Ferguson

Dr. Ferguson came to Barnes Hospital as assistant resident in surgery in 1953. From 1954 to 1956, he was a fellow in thoracic surgery at Washington University School of Medicine. He was appointed instructor in thoracic surgery in 1956, assistant professor in 1958, assistant clinical professor in 1964 and associate clinical professor in 1969. On July 1, he became professor of clinical surgery in the Division of Cardiothoracic Surgery.

A past president of the Barnes and Allied Hospital Society and member of the Regional Advisory Committee, Bi-State Regional Medical Program, Dr. Ferguson is on the staffs of Barnes and Affiliated Hospitals, Deaconess Hospital and St. Luke's Hospital. He is consultant to Cochran Veterans Administration Hospital and the Crippled Children's Programs of Southern Illinois and Missouri.

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Eli Lilly and Company, Indianapolis, Indiana 46206

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Volume 70, Number 9—September, 1973

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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V. SUMATHY, M.D., ELWYN M. GRIMES, M.D. *and*
GERALD L. MILLER, M.D., *Kansas City*

Chorioangioma of the Placenta

Case Report

Chorioangioma is a relatively rare tumor that may arise from the chorionic tissue of the placenta. The exact cause of this tumor is unknown. It has been suggested that it arises from the focal proliferation of undifferentiated angioblastic chorionic mesenchyme of the villi or of the cord.[1] The reported incidence varies from 1% to one in 50,000.[1-9] The reason for this wide discrepancy probably lies in the great variation in the size of the tumor and, also, the care with which they are looked for during examination of apparently normal placentas. Small intraplacental tumors are often overlooked during gross placental examinations. Most of the literature on chorioangioma emphasizes a high incidence of associated maternal and fetal complications.

Case Report

The patient, a 37-year-old white woman, gravida 7, para 6, was admitted to the Kansas City General Hospital on Sept. 22, 1971 with a history of amenorrhea of unknown duration. She complained of progressive abdominal distension, anorexia, backache, abdominal pain and dyspnea of four-days duration. Her previous pregnancies and deliveries were normal.

An examination revealed her pulse rate to be 110 per minute; respiratory rate, 24 per minute; and blood pressure, 130/80 mm Hg. The heart and lungs were found to be within normal limits. The abdomen was markedly distended and tense. Fetal parts were not palpable. The fetal heart rate was 140 beats per minute. The lower extremities exhibited 2+ pitting edema. Pelvic examination revealed the cervix to be uneffaced and 1 cm dilated.

A flat plate roentgenogram of the abdomen demonstrated a single fetus of approximately 30-weeks gestation in vertex presentation. An amniogram revealed contrast media in the fetal intestines, and there were no radiologically detectable anomalies. Symptoms of respiratory distress and abdominal pain were relieved by repeated amniocentesis, withdrawing 1,570 ml of clear amniotic fluid on Sept. 23, 1971 and 1,500 ml of additional amniotic fluid on Sept. 25, 1971. An analysis of amniotic fluid showed albumin to be 160 mg% and 84 mg% on the first and second occasions, respectively. The lab-

The authors report a case of chorioangioma associated with acute hydramnios, fetal cardiomegaly, anoxia, anemia and hypoproteinemia. The pathogenesis of hydramnios and fetal complications associated with chorioangiomata are discussed. Dr. Sumathy is a Fellow in Obstetrics and Gynecology, Dr. Grimes is a Resident in Obstetrics and Gynecology and Dr. Miller is Chairman of the Department of Obstetrics and Gynecology at the Kansas City General Hospital and Medical Center. Dr. Miller also is Clinical Professor at the University of Missouri-Kansas City School of Medicine.

oratory investigations were unremarkable. The blood group was O Rh positive.

On Sept. 28, 1971, the patient went into spontaneous labor. After an uneventful ten-hour labor, she was delivered of a 1,927 gm female infant with an apgar score of four at one minute and six at five minutes. The blood loss during the third stage of labor was 540 ml.

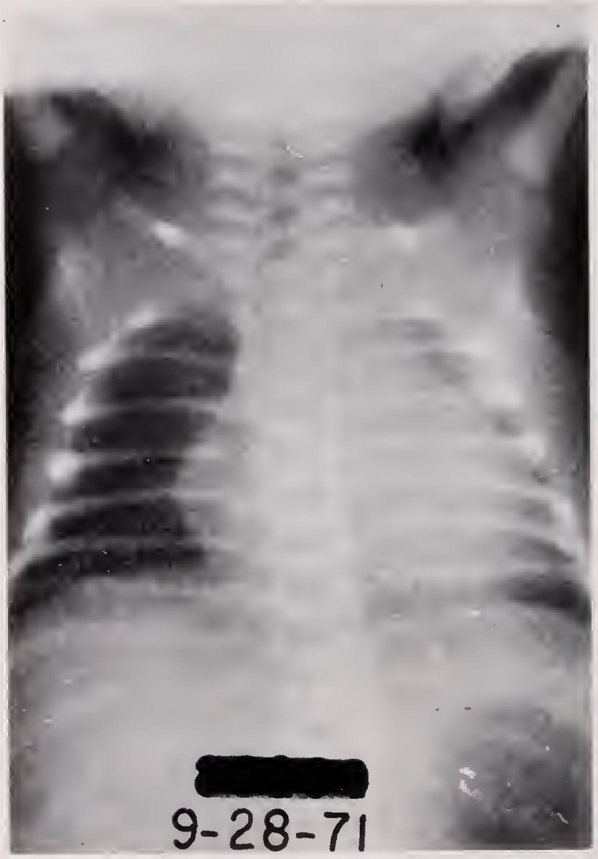
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Fig. 1 Chest roentgenogram of the infant showing enlarged heart and hazy lung fields. The intraarterial catheter is seen in the aorta.

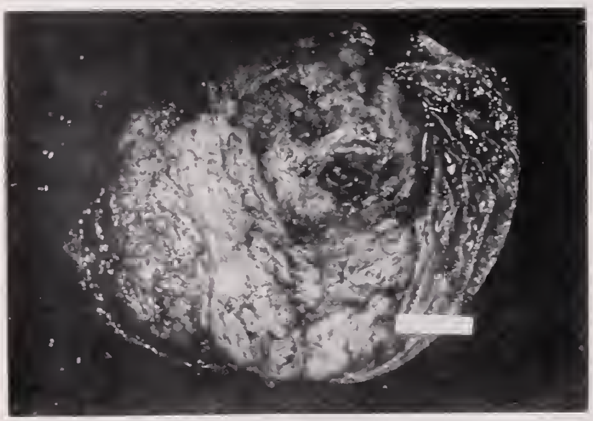

Fig. 3 Maternal surface of the placenta showing the tumor mass with areas of hemorrhage.

The infant was in shock at birth with aortic pressure of 32 cm of water. The hemoglobin was 7 gm 100 ml and platelets were increased. The total serum protein was 3.9 gm/100 ml; albumin, 2.04 gm/100 ml; and total globulin, 1.86 gm/100 ml. A roentgenologic examination of the chest revealed a mildly enlarged heart and evidences of hyaline membrane disease (Fig. 1). The infant was resuscitated and transfused with packed cells.

The placenta weighed 1,250 gm and measured 27 cm x 20 cm x 8 cm. The umbilical cord was centrally inserted and had three vessels. A large circumscribed, globular, firm mass of about 10 cm diameter was seen protruding from the fetal and maternal surface (Figs. 2 & 3). It was in direct contact with the insertion site of the umbilical cord. The cut section revealed a large hemorrhagic, lobulated mass occupying the entire depth of the placenta. The rest of the placenta appeared pale and anemic (Fig. 4). Microscopic examination revealed the presence of multiple, thin-walled, vascular spaces lined by a single layer of endothelium and a small amount of supporting connective tissue (Fig. 5). The tumor

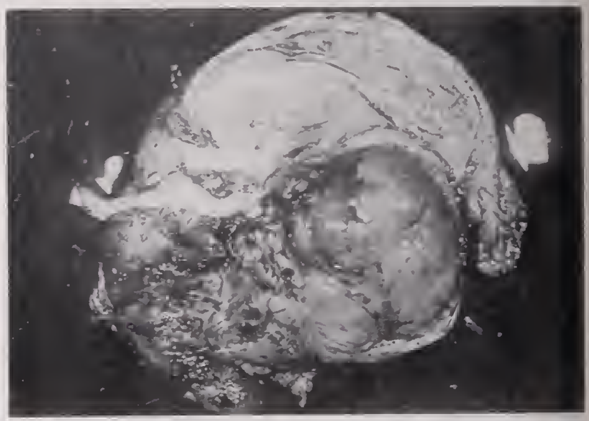

Fig. 2 Fetal surface of the placenta revealing the circumscribed, lobulated and bulging tumor of 10 cm x 10 cm size.

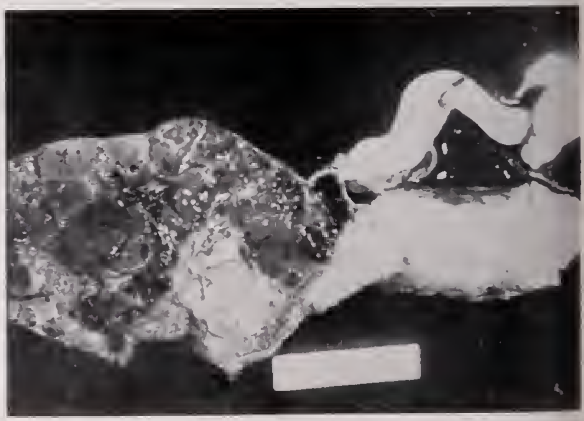

Fig. 4. Cut section of the placenta revealing the close proximity of the lobulated tumor to the insertion of the umbilical cord.

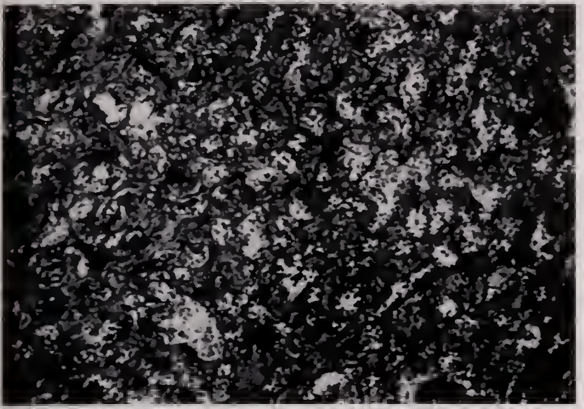

Fig. 5 High-power photomicrograph of chorioangioma showing the vascular spaces lined by endothelial cells and red blood cells in the spaces.

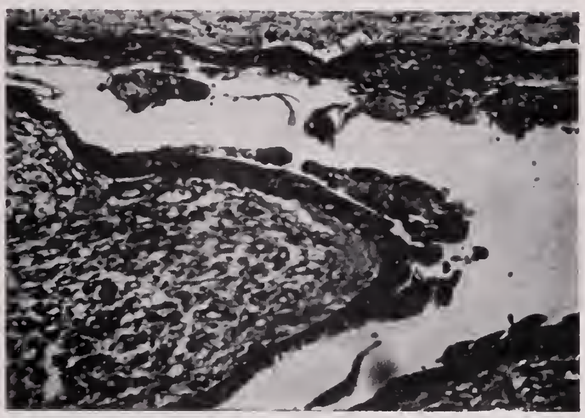

Fig. 6 High-power photomicrograph of chorioangioma showing the vascular spaces and trophoblastic cell layer covering a lobule.

lobules were covered with a trophoblastic cell layer (Fig. 6). In other areas, evidences of infarction and necrosis were seen. There were numerous syncytial knots in the adjacent placental tissue. The umbilical cord appeared normal.

DISCUSSION

The exact nature of chorioangioma is not settled. Some consider it to be a hemartoma, whereas others feel that it is a neoplasm.[2,6] Increased association of fetal congenital malformations support the view that it is probably a vascular malformation.[10–12] The size of the tumor may vary from 2 mm to 22 cm.[6] The largest reported tumor weighed 78 gm.[13] It may be found in various locations, including the fetal or maternal surface of the placenta, the fetal membranes, or may be attached to the umbilical cord.

The majority of reported cases are asymptomatic, but the larger tumors are often associated with symptoms. The most common associated complication is hydramnios. It has been reported that 18% to 35% of all cases have hydramnios.[5, 11, 13–15] The tumors associated with this complication are either larger than 5 cm or they are multiple in nature.[1] The exact mechanism of production of excessive amniotic fluid in chorioangioma is not clearly understood. Klaften[4] considers the situation of the tumor close to the cord insertion to be important in causing possible mechanical obstruction to the blood flow in the cord and, thereby, producing increased transudation of fluid into the amniotic sac. Wallenburg's analysis of cases does not support this view.[1] Kotz and Kaufman[16] state that the large vascular surface of the tumor that bulges over the fetal surface of the placenta may account for increased transudation of fluid.

There are other reports that contradict this view, wherein the tumors are simply situated over the maternal surface of the placenta but, nevertheless, are associated with hydramnios.[10, 17] McInroy and Kelsey[15] believe that bypassing of fetal blood through the hemangioma results in increased waste products in the fetal urine that, in turn, increases the osmotic pressure of amniotic fluid causing hydramnios. Wallenburg[1] suggests that arteriovenous shunts in the larger hemangioma may result in fetal congestive cardiac failure and water imbalance that may be a possible etiological factor in excessive amniotic fluid production. In the present case, the site and the size of the tumor and the fetal cardiac enlargement support some of the above views.

The presence of arteriovenous shunt in large hemangioma is said to place a burden on the fetal heart by increasing the cardiac output. This results in cardiomegaly with or without congestive cardiac failure.[1, 10, 12, 18, 19] It has been suggested that during the circulation of fetal blood through the network of chorioangioma, the red cells may be injured and subsequently destroyed, causing anemia in the fetus.[1, 17, 20, 21] The incidence of intrauterine death in association with large chorioangiomas is reported to be high. Marked cord compression by the tumor,[22] shunting of fetal blood through the tumor with subsequent anoxia[2] and congestive cardiac failure are presumed to be responsible for this high fetal wastage.[2, 20, 23]

Interestingly, the presented case did reflect evidences of intrauterine anoxia, anemia, hypoproteinemia and cardiomegaly. Another complication that may be seen in the infant is throm-

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RONALD JAMES, M.D., ***Columbia***

Rational Approach to the Treatment of Insulin-Dependent Diabetes Mellitus

The purpose of this paper is to present a rational approach to the management of insulin-dependent diabetes mellitus. Since the unique problems involved in treating the child with diabetes were reviewed recently in Missouri Medicine by Jackson and Guthrie,[1] this paper will focus on the treatment of diabetes in the older adolescent and adult patient.

The four major factors which regularly act to influence the blood glucose level of an insulin-dependent diabetic are (1) insulin administration, (2) food intake, (3) exercise and (4) emotional status. Other factors which may assume importance include infections and the use of certain drugs. The insulin and food taken by cooperative patients can be quantitated quite accurately, whereas exercise is less easily measured and the effect of various emotional states is almost impossible to quantitate. Because all four factors cannot be controlled at all times, some diabetics have wide swings in blood glucose despite meticulous efforts to balance injected insulin and exercise against food intake. Such individuals are said to be "brittle" or "unstable" diabetics, and many times must be allowed to have some hyperglycemia, and, even, glycosuria to avoid frequent hypoglycemic episodes. Other patients seem to be easily controlled, possibly because they are still able to secrete some endogenous insulin.

This article presents an approach to the management of insulin-dependent diabetes which is based on the principle of balancing the blood glucose lowering effect of insulin and exercise against the rising blood glucose brought about by the ingestion of food or by hepatic glucose production. A therapeutic program providing a high level of control is recommended as the best means of helping the diabetic to be a happy, otherwise healthy and productive member of society. Dr. James is Assistant Professor, Department of Medicine, University of Missouri School of Medicine.

Ideally, the diabetic should have neither hypoglycemia nor hyperglycemia. Even though this may be unattainable in some patients, every effort should be made to control the diabetes as well as possible. The following approach to the management of insulin-dependent diabetes is based on the principle of balancing the blood glucose lowering effects of insulin and exercise against the rising blood glucose brought about by the ingestion of food or by hepatic glucose production.

Diet

The diabetic's caloric intake should be such that he maintains ideal weight. Hopefully, it also will satisfy the appetite, restriction being necessary only to avoid or treat obesity. In prescribing a diabetic diet, several methods may be used to estimate the caloric requirements: (1) previous daily caloric intake if it is known, (2) a dietary history or (3) 15 calories per pound of ideal weight. This initial level should then be adjusted up or down as needed to attain and maintain ideal weight and to satisfy the appetite.

The diabetic diet should consist of well balanced proportions of carbohydrate (40%-50%), fat (30%-40%) and protein (about 20%). There is no good evidence that carbohydrate restriction as such has any beneficial effect upon the diabetic receiving adequate insulin therapy.

The diabetic's diet should be divided into six feedings in the form of three meals and three snacks, the latter being given between the meals and at bedtime. The snacks are necessary to prevent hypoglycemic episodes several hours after a meal at a time when no food is being absorbed and metabolized, but when the injected insulin is still having a blood glucose lowering effect. The following distribution of caloric intake is one which is commonly used: 2,1,2,1,2,1/9.

The carbohydrate in the diet should be in the form of starches, with simple sugars such as sucrose being kept to a minimum. Since injected insulin is absorbed from subcutaneous or intramuscular sites over a period of hours, it goes into the blood stream slowly and cannot provide the rapid rises in insulin needed to metabolize the high levels of glucose produced by rapid digestion and absorption of simple sugars. Thus, fruit, which contains a high proportion of simple sugars, should be limited to no more than two exchanges at any one feeding and should not be used alone as a snack. Starch, on the other hand, is digested to simple sugars and absorbed over a period of one to two hours. Therefore, the slowly absorbed exogenous insulin is available at the time when the products of starch digestion are in the blood stream and need to be metabolized.

Although alcohol is metabolized primarily as fat and can be calculated into the diet as such, its consumption should be kept to a minimum because it is usually consumed in beverages which contain variable but often large amounts of sugars and other food substances. Excessive alcohol intake also may result in failure to follow the treatment regimen and lead to the development of either hypoglycemia or ketoacidosis.

It is well to keep the ratio of polyunsaturated to saturated fats in the diet as high as possible. However, unless some form of hyperlipoproteinemia can be demonstrated, fat and cholesterol or carbohydrate need not be restricted.

Vitamin supplements are unnecessary if the diabetic consumes a well balanced diet of 1,000 calories or more.

The diet in general should be made up of those foods which the diabetic usually eats because he is more likely to follow it if he is satisfied. Changes in the size of meals or snacks or both may be made to improve the level of diabetic control. However, if the diabetic is satisfied with his diet and does not want it changed, alterations in insulin doses are the preferred approach to achieving better control since they take little effort and do not interfere with established eating habits.

Insulin

A rational approach to the administration of insulin must take into consideration the duration of action of the various insulin preparations as well as an appreciation of insulin secretion in the nondiabetic individual. Normal people secrete an increased amount of insulin after each feeding and small amounts in the fasting state, the latter being necessary, among other actions, to metabolize glucose produced by the liver. Although it is impossible to prescribe insulin in such a way that the action of the normal pancreas is perfectly simulated, there are compelling reasons why the physician should make an effort in this direction.

TABLE 1

ONSET AND DURATION OF ACTION OF INSULIN PREPARATIONS

Insulin	*Onset (Hrs. After injection)*	*Duration (Hrs. After injection)*
Fast acting		
Regular (crystalline)	½	6
Semilente	2	8
Intermediate acting		
Globin	3	12
NPH (Isophane)	4	16
Lente	4	16
Long acting		
Protamine zinc	8	36+
Ultralente	8	36+

Insulin preparations can be divided into three general types: (1) fast acting, (2) intermediate acting and (3) long acting. The various preparations and their onset and duration of action are shown in Table 1. It should be emphasized that these periods of action are only rough guidelines and that, in reality, the duration of effect varies with the size of the dose and probably with many other factors.

Regular insulin is the most commonly used, fast acting form. It can be mixed in any proportion in the same syringe with globin or NPH insulin and with lente in a ratio not exceeding unity. Semilente insulin is occasionally used in combination with lente. Globin and NPH are the intermediate acting insulins most commonly used at the University Medical Center, although lente is sometimes used. The long acting insulins probably should not be used since quantities sufficient to cover the diabetic's need during the day when he is eating often produce severe noctural hypoglycemia.

The initial total 24-hour dose of insulin can only be estimated since the exact requirement must be determined empirically. If the diabetic already takes insulin, his *current daily dose* can be used as a starting estimate. This quantity may be increased or decreased on the basis of his past level of diabetic control. When the patient has not been taking insulin, *¼ unit of insulin* *per pound of ideal weight* may be used as the initial total daily dose. These starting estimates usually prevent ketosis without causing hypoglycemia.

Multiple daily doses of a fast acting insulin or various combinations of the fast and intermediate acting insulins may be used in an effort to simulate the pattern of insulin secretion by the normal pancreas. The author has found that use of regular insulin alone or in combination with NPH, globin, or sometimes lente, usually provides adequate coverage throughout the 24-hour period. The following distribution provides a good starting approximation:

AM: ⅔ of the total daily dose
  Regular: ⅓ of the AM dose
  NPH (or Globin): ⅔ of the AM dose
PM: ⅓ of the total daily dose
  Regular: ½ of the PM dose
  NPH (or Globin): ½ of the PM dose

These two doses should be given 30 minutes before breakfast and the evening meal, respectively. The AM regular insulin acts quickly to cover breakfast and the later mid-morning snack and continues to have an effect until about noon. It is responsible for hypoglycemic episodes between breakfast and the noon meal and is important in determining the level of glycosuria before noon. The AM NPH becomes effective before noon, covers the noon meal and afternoon snack, is responsible for hypoglycemia during the afternoon and determines the degree of glycosuria before the evening meal. The PM regular insulin combines with the morning NPH to cover the evening meal and the bedtime snack. It determines the bedtime urinary glucose and is responsible for hypoglycemic episodes between the evening meal and about midnight. The PM NPH covers the diabetic's insulin need during the sleeping hours, is responsible for hypoglycemia during this period and determines the early morning level of glycosuria.

The distributions are only starting approximations. The diabetic is asked to keep a record of the time at which any hypoglycemic episodes occur as well as the results of urinary glucose determinations (usually performed by the two drop Clinitest method) done four times daily before meals and at bedtime. Based upon the times at which glycosuria or hypoglycemia or both occur, if at all, each of the four insulin doses (AM regular, AM NPH, PM regular and PM NPH) may be left unaltered or adjusted independently of each other in an effort to attain a finer level of diabetic control.

In some cases, such as during the last trimester of pregnancy when optimal diabetic control is essential, four doses of regular insulin given approximately 30 minutes before meals and at midnight offer an excellent distribution for administering this drug. The following distribution has been found to be a good starting approximation:

Before breakfast: 35% of the total daily dose
Before noon: 25% of the total daily dose
Before supper: 30% of the total daily dose
At midnight: 10% of the total daily dose

As with the other distributions, alterations can be made in these four doses to attain a better level of control. This type of distribution also will work quite well for the nonpregnant insulin dependent diabetic. For obvious reasons, however, most patients prefer to take no more than two injections daily.

Changes of no more than one to four units at a time in any one dose, depending on the size of the total daily dose, are usually appropriate. Unless severe hypoglycemia or ketosis develops, adjustments should not be made more often than about every three days. This allows a pattern of glucose response to develop to any particular combination of insulin dosages.

Attainment of the finest level of diabetic control is best accomplished by making adjustments in the diet and insulin with the patient at home and carrying on his usual activities. This often can be accomplished via the telephone, thereby reducing the need for numerous return visits.

Under ordinary circumstances, the "sliding scale" method is not an advisable approach to the administration of insulin and, in this author's opinion, should not be used. Occasionally, the diabetic's control may be so poor that the amount of insulin to be given needs to be determined by the current levels of glucose and ketones in the blood or urine. This may occur, for example, during an episode of ketoacidosis or some other illness which has an adverse effect on diabetes. In such situations, the patient's clinical status as well as his level of glycemia and ketonemia (or glycosuria and ketonuria) become important. For this reason, the "sliding scale" order as usually written may not be appropriate. Under these circumstances, the patient should be evaluated clinically each time insulin is to be administered and a dose based on all aspects of his condition ordered.

EXERCISE

Exercise, independently of insulin action, increases glucose uptake by muscle and, therefore, acts to lower blood glucose. As a result, it may produce hypoglycemia in the diabetic taking insulin. To prevent this, extra food containing starch or protein in the form of one or two bread, meat or milk exchanges should be taken in addition to the usual diet before increased physical activity. Alternatively, the insulin dose covering the period of increased activity may be reduced. Exercise is thought to be particularly good for diabetics, but it will provide maximum benefit and cause the least disturbance to glucose homeostasis when taken regularly on a daily basis.

Emotional Status

Since the patient's emotional status often has a profound influence on his level of diabetic control, every effort should be made to help him establish a mature emotional state as free from anxiety as possible.

Summary

The methods outlined above are only *guidelines* for treating the insulin dependent diabetic. Each patient's therapeutic regimen must be individualized. The alterations which are made should coincide as closely as possible with his desires, life style and tolerance for such a program. The ultimate goal is a happy, otherwise healthy, productive member of society who lives a normal life span which is hopefully free of the acute and chronic complications of his disease. A program providing a high level of diabetic control provides the best means of reaching this goal.

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Reprints: Ronald James, M.D.
Department of Medicine
University of Missouri
Medical Center
Columbia, Mo. 65201

Chorioangioma of the Placenta

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bocytopenia. Froehlich[24] has reported two infants of chorioangioma cases with thrombocytopenia and petechiae that disappeared in a few days. It has been suggested that the platelets probably get sequestered within the chorioangioma causing their depletion. Once the infant is separated from the tumor, this defect spontaneously is corrected. Other reported fetal anomalies are skin hemangiomas, single unbilical artery and various other congenital malformations.[11, 14, 24–27] A female preponderance in the infants of chorioangioma cases has been observed by Asodourian and Taylor.[14] Prematurity, which is commonly associated with the lesion, is primarily attributed to the associated hydramnios.

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Reprints: Gerald L. Miller, M.D.
2929 Baltimore Ave.
Kansas City, Mo. 64108

SAJID Q. CHUGHTAI, M.D. *and*
KENNETH C. WIEBE, M.D., *Kansas City*

Volvulus of the Stomach

Case Report

GASTRIC VOLVULUS is a rare condition characterized by abnormal rotation of the stomach which may or may not be symptomatic. The circulation of the stomach is sometimes impaired, but not always. A recent case was encountered at Baptist Memorial Hospital which prompted us to review the literature on this rare condition.

CASE REPORT

A 60-year-old white woman was admitted at Baptist Memorial Hospital on Feb. 25, 1972 with severe abdominal pain which started about 36 hours prior to admission. The pain was associated with vomiting, which occurred every 15 to 30 minutes. The first emesis was noted about three hours after a heavy meal. She denied any biliary vomitus or hematemesis.

She had been subject to milder and less frequent attacks of similar pain in the past and had a known hiatal hernia. She had been hospitalized on Jan. 7, 1972 with similar episode. Gastric outlet obstruction was suspected and an upper gastrointestinal (GI) series roentgenogram showed "upside down stomach" with antrum situated high on the left side and the fundus below on the right side (Fig. 1).

Physical examination on that admission in January revealed marked epigastric tenderness and some distension without any palpable masses. A nasogastric tube was passed without difficulty, and the patient improved with conservative treatment. Her pain disappeared the following day and the nasogastric tube was removed.

During her hospitalization in February, 1972, hiatus hernia repair was recommended. At operation on March 1, 1972, a sliding hernia was found with

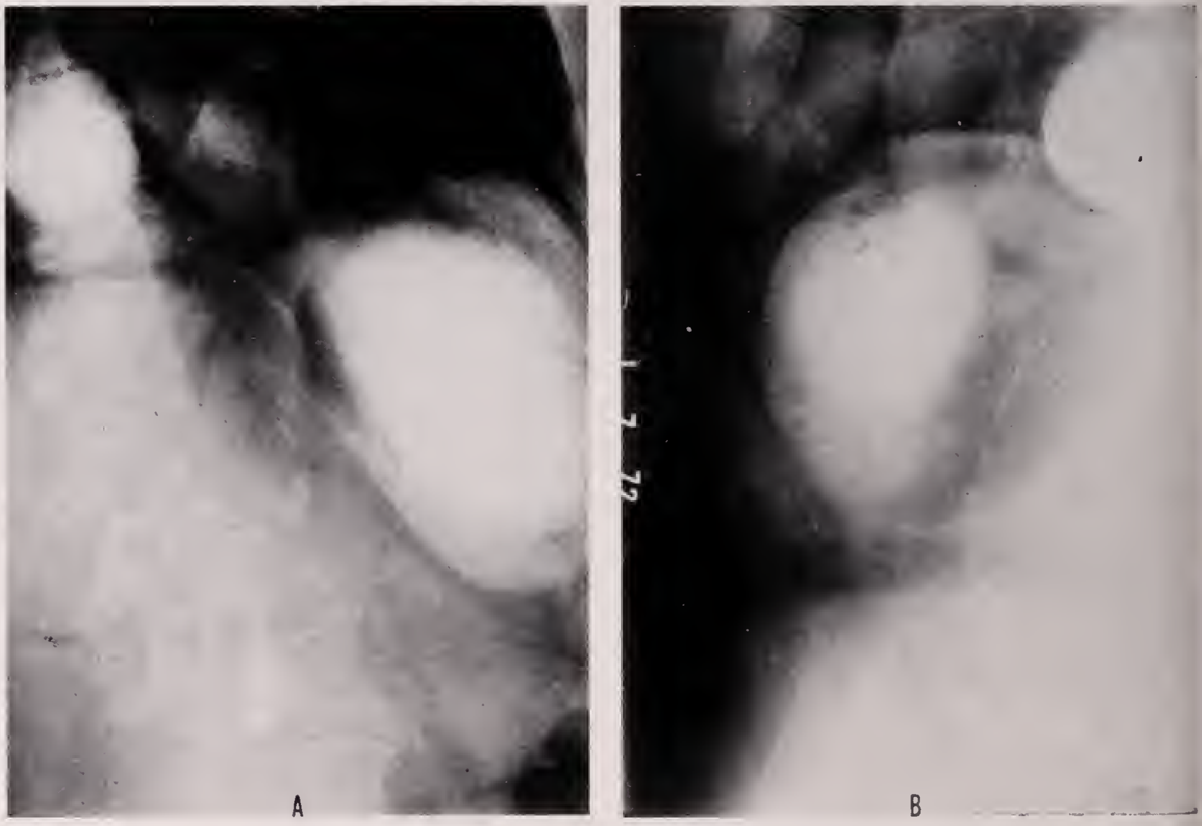

Fig. 1 (A) UGI series showing "upside down stomach" with antrum lying high on the left side and the fundus below on the right side (Mesentero-axial volvulus). (B) Lateral view.

the antrum lying in the mediastinum. The pylorus and duodenum were found lying in the left upper quadrant of the abdominal cavity anterior to the fundus. The esophageal hiatus was about 12 cm x 5 cm and the hernia could be reduced easily. Crural repair of the hernia was carried out. Tube gastrostomy was performed for postoperative decompression and fixation of the anterior gastric wall. The postoperative course was uneventful except for mild pleural effusion that subsided. A postoperative upper GI series roentgenogram showed delayed emptying and retention of food, perhaps related to atony (Fig. 2). Nine months after her operation she was asymptomatic.

DISCUSSION

The term volvulus is derived from the latin word "volvere," meaning "to twist," and is defined as abnormal rotation. Historically, the first case of volvulus of the stomach was reported by Berti in 1866 on an autopsy specimen.[1] Berg, in 1897, was the first to operate successfully on a patient with this rare condition. Payr was able to collect 22 case reports by 1909. In 1920, Roosevelt demonstrated a chronic recurrent volvulus radiologically. Recently, Wastel and Ellis[2] have reviewed a total of 206 cases and added eight from their own experience in their report.

AGE AND SEX INCIDENCE

Gastric volvulus can occur at any age, but peak incidence was found to be in patients between the ages of 45 and 75. The condition is especially rare in children.[3] The sex incidence is almost equal, being 46% in men and 54% in women.[2]

CLASSIFICATION

No single classification is satisfactory since several factors are involved. The following classifications were proposed by Von Harberer (1912) and quoted by Singleton.[4]

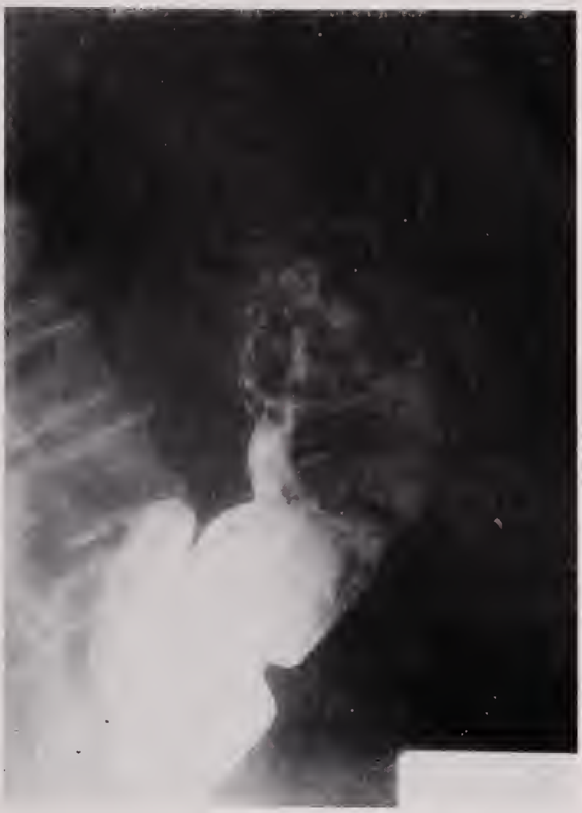

Fig. 2 Postoperative atonic and distended stomach with delayed emptying.

1. **Type**

a. *Organo-axial* (OAV) (Fig. 3). Rotation of the stomach occurs around the longitudinal axis or cardiopyloric line. The rotation is usually from right to left, but it may occur in the re-

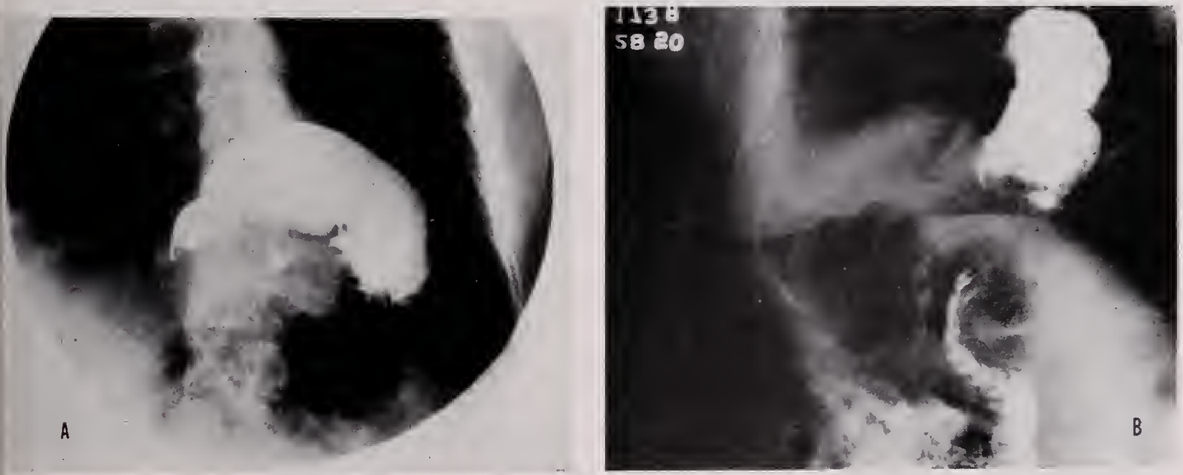

Fig. 3 (A) Organo-axial volvulus. The greater curvature is lying superiorly while the lesser curvature has rotated anteriorly around cardiopyloric-axis to come to lie inferiorly. (B) Lateral view.

Less than 250 case reports of volvulus of the stomach have been reported in the world literature. With this report of a recent case, the authors describe two types of this rare entity, organo-axial and mesentero-axial. They state that early surgical intervention should reduce mortality in acute cases. Dr. Chughtai was Chief Resident in Surgery at Menorah Medical Center at the time this paper was written. He is now a Resident in Cardiothoracic Surgery at St. Vincent Charity Hospital in Cleveland, Ohio. Dr. Wiebe is Clinical Assistant Professor of Surgery at the University of Missouri School of Medicine and Clinical Instructor of Surgury at the University of Kansas School of Medicine.

verse direction. Both of these forms are true volvulus and may produce complete obstruction. The entire body of the stomach may be involved in the twisting process, producing "wrung out rug" appearance[5] (Fig. 4).

b. *Mesentero-axial* (MAV) (Fig. 1). Rotation of the stomach occurs around the transverse axis from the lesser to the greater curvatures or sagittal plane. This happens only when the pyloric fixation is lost, allowing the pylorus and antrum to "double up" (Fig. 4). The right colon may be pulled sufficiently to cause angulation and obstruction of the colon. Less commonly, the splenic fixation may be deficient, resulting in rotation of the proximal greater curvature distally to the right subhepatic space. This type of volvulus usually is chronic or intermittent and is encountered more often than the organo-axial rotation.

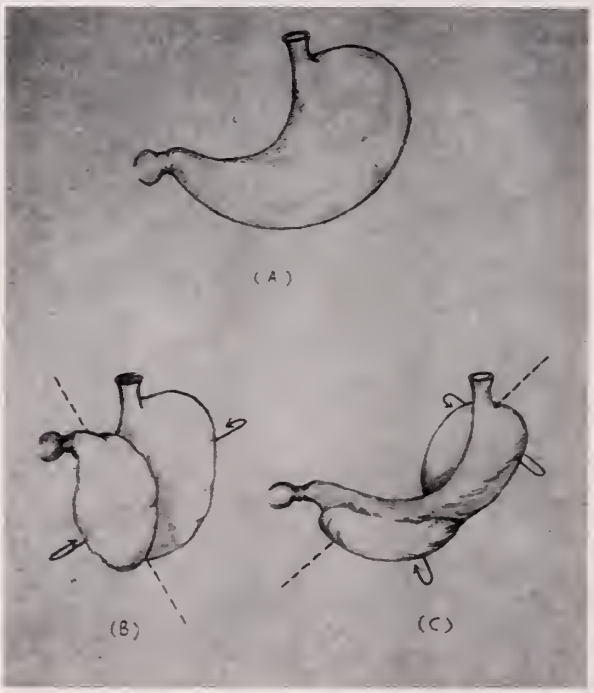

Fig. 4 (A) Normal stomach. (B) Mesentero-axial volvulus (MAV). (C) Organo-axial volvulus (OAV).

c. *Mixed.* Mesentero-axial rotation can predispose the stomach to further twisting in organo-axial rotation.

2. Extent

a. *Total.* The greater curvature comes to lie superiorly between the liver and diaphragm while the posterior wall of the stomach faced anteriorly.

b. *Partial.* The rotation is limited to the one segment of the stomach, usually the pyloric portion.

3. **Direction.** Anterior rotation is much more common than the posterior as the transverse colon comes to lie in front of the stomach in OAV while the pylorus passes in front of the stomach in MAV. For posterior rotation to occur, the transverse colon must pass behind the stomach, elongating or tearing the meso-colon. In 39 cases of OAV studied, only eight cases of posterior rotation were found.[2]

4. **Severity.** The acute form presents as an upper abdominal catastrophe resulting from obstruction or strangulation. The chronic form may be asymptomatic or present with recurrent or persistent symptoms that can be confused with gastric ulcer or hiatus hernia. Acute volvulus carries a much graver prognosis as 20 of 36 patients with MAV (56%) and 31 of 73 patients with OAV (42%) died.[2] These figures include the older literature and, undoubtedly, the mortality has improved in the recent years.

5. **Etiology**

a. *Secondary.* Volvulus can be related to demonstrable intraabdominal disease which can be intra- or extragastric in origin. The most common causes are hiatal hernia, eventration of the diaphragm, benign or malignant tumors of the stomach, paragastric adhesions, chronic gastric ulcers or, rarely, chronic duodenal ulcers. Splenomegaly, distended colon with gas and phrenic nerve injury have been implicated as the cause in some reported cases. Isolated instances or acute gastric volvulus after pneumonectomy for bronchogenic carcinoma,[6] bilateral pulmonary lower lobectomy for bronchiectasis,[7] and peri-stomal hernia following colostomy[8] have been reported. Bockus estimated that about 20% of total 237 cases have some form of diaphragmatic abnormality. Thirty-eight of 60 cases of MAV (63%) and 90 of 122 cases of OAV (74%) are reported to be of secondary variety.[2]

b. *Idiopathic.* In about 35% of cases, no associated disease or abnormalities are noted. Relaxation of the ligamentous support of the stomach is essential for the development of the gastric volvulus and may be congenital in most instances. A pronounced degree of gastroptosis has been observed in such cases due to weakness of the gastrohepatic, gastrocolic or gastrosplenic ligaments. Experimentally, it is impossible to twist the stomach with intact ligaments. Acute dilatation of the stomach, trauma, intractable vomiting and increased intra-abdominal pressure, such as seen in pregnancy, are some of the precipitating factors. The degree of twisting is variable but the average is 180 degrees.

Clinical Features

Acute gastric volvulus is characterized by sudden and severe epigastric pain with vomiting and ineffectual retching.

Abdominal distension and tenderness may be associated with a shock-like appearance. The Borchardt-Lenormont triad (1904) has been considered pathognomonic of the diagnosis, as follows:

1. Unsuccessful attempt to vomit.
2. Circumscribed epigastric pain.
3. Inability to insert nasogastric tube into the stomach.

History of ingestion of a heavy meal prior to the onset may be available frequently. The small amount of vomitus is free of bile and fecal material as a rule. The stomach is able to tolerate torsion of marked degree because of its excellent blood supply, but vessels occasionally can be occluded, resulting eventually in necrosis and death. The diagnosis is seldom made before operation or autopsy.

The differential diagnosis in atypical cases should include any intraabdominal emergency, particularly in cases of perforated ulcer, acute pancreatitis, strangulated bowel obstruction or mesenteric vascular thrombosis.

Plain x-rays of the abdomen in upright position may help in the diagnosis if the left diaphragm is elevated or may show a diaphragmatic herniation. The presence of two or more fluid levels in a distended abdomen is suggestive of the diagnosis. Upper GI series x-rays are confirmatory. The lower esophagus may be distended and can be mistaken for volvulus of the cecum or colon.[9] Barium enema x-rays may be required to exclude this possibility. The stomach may be inverted with the greater curvature above the level of the lesser curvature. The cardia and pylorus may lie at the same level. The mucosal folds may show torsion or twisting. An hourglass stomach may be associated with this condition. In chronic volvulus, the abnormal placement of the stomach will be obvious. A cascade or "cup and spill" form of the fundus must be differentiated from the volvulus.[10] One fluid level is seen in the cascade stomach while two are often seen in volvulus. The greater curvature is uppermost only in volvulus, and it forms a convex border continuous with the duodenum. The cardia has a low position in the volvulus due to rotation, whereas it is normal in position in the cascade stomach.

Treatment

Acute gastric volvulus is a surgical emergency and immediate exploration is recommended. Although reported mortality in patients treated surgically is 40%, those not operated on have invariably died. In secondary cases, treatment is directed to the primary cause after reduction of the volvulus. This may entail hiatus herniorraphy, repair of eventration of the diaphragm and partial gastrectomy with a Bilroth I or II procedure. In idiopathic cases at laparotomy, detorsion of the stomach may be possible after only decompression with needle and suction. Some form of gastric fixation has to be added if the patient's condition permits. Anterior gastropexy is an easy procedure that implies fixation of the stomach to parietal peritoneum and replacing the colon in its proper position.[11] The site of needle aspiration can be utilized to fashion a gastrostomy. Tube gastrostomy is helpful in postoperative decompression and early supplementation of oral intake. This also will obviate the need for gastropexy and is favored by Guernsey and Connolley.[12]

Maingot[1] considers suturing the entire gastrocolic and gastrosplenic ligaments to the anterior parietal peritoneum as the simplest, safest and most satisfactory method of gastropexy. He claims superior results by this method as compared to conventional gastropexy when the stomach itself is sutured.

Opolzer's operation of fundo-antral gastropexy has been performed when it is difficult to untwist the stomach and implies creation of a stoma between fundus and antrum lying side by side. This procedure is not recommended since the risk of strangulation persists and the obstruction is not bypassed.

Summary

Volvulus of the stomach is a rare entity with less than 250 cases reported in the world litera-

(Continued on page 663)

LAWRENCE KAHN, M.D., ***St. Louis***

Washington University Pediatric Nurse Practitioner Training Program

Development and Experience

An ever increasing number of physicians recognize the Pediatric Nurse Practitioner (PNP) as a registered nurse who has acquired the skills through special training to provide a significant amount of pediatric care. The PNP delivers these services in conjunction with and under the supervision of a physician. Since the institution of the first program at the University of Colorado[1] in 1965, more than 35 courses of training have become operational with classes ranging in size from as few as three students to as many as 32.[2] Programs vary from those providing training on a half-time basis for a 16-week period to those offering training on a full-time basis for as long as one year. Guidelines have been established by the American Academy of Pediatrics and the American Nurses' Association[3] suggesting minimal requirements for the training of such personnel. As yet, however, there is insufficient substantial evidence to indicate curriculum standardization.

With the rapid increase in the number of institutions offering training for the PNP, there has been considerable interest in the structure of those programs which have had some operational experience. Moreover, interest has been generated among physicians and agencies who may be the future employers of these personnel. Therefore, this report was prepared in response to the many requests for information relating to the development and experience of the Pediatric Nurse Practitioner Training Program (PNPTP) at the Washington University School of Medicine.

Development

After a planning period of about six months, the PNPTP became operational in September of 1968 with a class of three registered nurses. It was among the first of those organized on a full-time basis. The size of the class has increased each year to the present complement of 11 students (Table 1). Funding for the first and second classes was made possible by grants from the W. K. Kellogg Foundation and the Metropolitan Life Insurance Company. It is now supported by tuition. A pediatrician provides half-time services as the program director. A recent PNP graduate assists in curriculum development, student counseling, teaching and supervision. Members of the Department of Pediatrics and other faculty specialists in such fields as orthopedics, gynecology and otorhinolaryngology contribute significantly to the teaching. Additionally, several organizations in the St. Louis area provide staff and facilities for special instruction (Table 2).

Recruitment and Selection

Virtually no active recruitment has been necessary to enlist students. The first class included nurses with B.S. degrees from within the medical center who expressed interest in the program as it was being developed. The second class was composed of nurses whose homes were in the St. Louis area and who had heard of the program by word-of-mouth. For the third and

TABLE 1

Year	*Number of Students*
1969-1970	3
1970-1971	6
1971-1972	8
1972-1973	11

TABLE 2

ORGANIZATIONS PROVIDING FACILITIES AND STAFF FOR SPECIAL INSTRUCTON FOR PNPTP

1. St. Louis County Health Department
2. St. Louis City Health Department
3. St. Louis Comprehensive Neighborhood Health Center
4. Maternal & Infant Care Program, St. Louis County
5. Department of Audiology, The Jewish Hospital of St. Louis
6. St. Louis State School and Hospital
7. The Miriam School
8. The Washington University School of Dentistry
9. The Special School District of St. Louis County
10. The St. Louis County Hospital

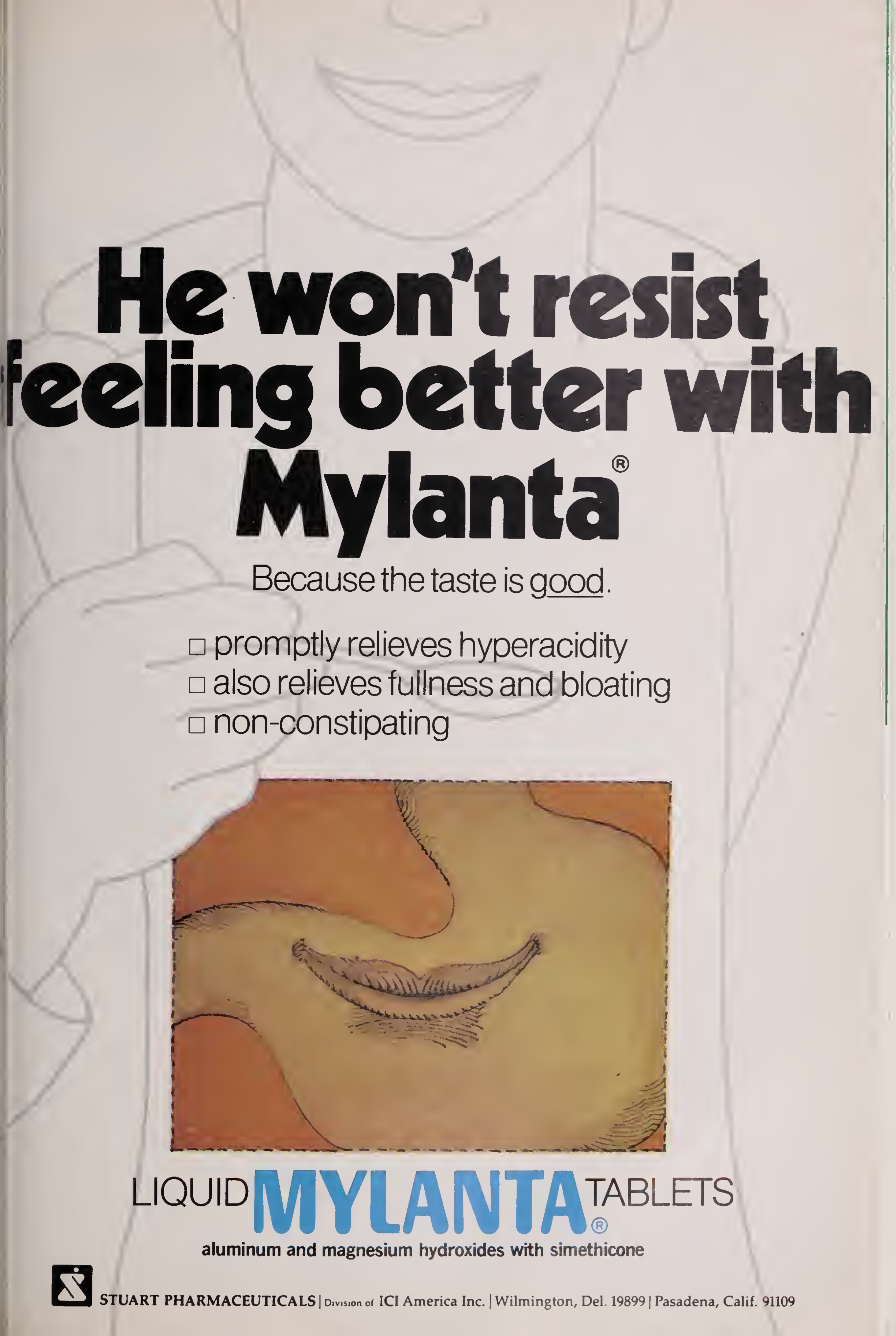

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TABLE 3

CHARACTERISTICS OF APPLICANTS FOR THE 1972-1973 PNPTP
BY GEOGRAPHIC ORIGIN AND DEMOGRAPHIC CHARACTERISTICS

	St. Louis & Vicinity		*Other Parts of the U.S.*		*Abroad*			
	Ap*	Ac†	Ap*	Ac†	Ap*	Ac†	Ap*	Ac†
Number	18	8	17	2	3	1	38	11
Sex								
Male	1	1					1	1
Female	17	7	17	2	3	1	37	10
Race								
Black	5	4					5	4
White	13	4	17	2	3	1	33	7
Age								
Below 30	4		15	2	3	1	22	3
30-40	8	4	2				10	4
Over 40	6	4					6	4
Education								
Diploma program	17	7	11	1	2	1	30	9
B.S. degree	1	1	4		1		6	1
Masters degree			2	1			2	1
Nursing Experience								
0-5 yrs.	4	2	11	1	2	1	17	4
6-10 yrs.	6	2	4	1	1		11	3
More than 10 yrs.	8	4	2				10	4
Marital Status								
Married	12	4	2				14	4
Single	6	4	15	2	3	1	24	7

* Applied.
† Accepted.

fourth classes as well, no active recruitment was necessary since awareness of the program locally had resulted in widespread interest. Between Sept. 1, 1971 and July 1, 1972, there were 145 unsolicited inquiries about the program, a third of which were from the St. Louis area and the remainder from the rest of the U. S. and abroad.

A description of the 38 nurses who completed applications for the current (1972-1973) program is presented in Table 3. Among these were ten women who have been active in nursing for more than ten years and one nurse who had had extensive nursing experience in the past but who had become inactive in nursing during the past five years. Four members of the present class were selected from this group. Moreover, two members of the preceding class of eight PNP's were women who had not engaged in nursing for six and 19 years, respectively. All of these women have indicated that the PNPTP represented a challenge in a new and interesting area of nursing which is sufficiently stimulating to warrant either the modification of established career patterns or the return to active professional status from voluntary retirement. The implications of these views are obvious when one considers the large number of nurses in this country who are not engaged in any professional activity.

Selection of students has been made on the basis of several factors. These have included R.N. certification from a training program recognized by the National League of Nursing, experience and interest in pediatrics, a desire to enter a new field, past academic accomplishment, and an interview suggesting the candidate's potential capacity to formulate independent judgment relative to health care. No formal testing was conducted. A degree of Bachelor of Science in nursing was preferred but not required; 14 of the 27 applicants admitted to the program have a B.S. degree.

CURRICULUM

The curriculum extends over eight months and requires the full-time involvement of the student.[*] A didactic period of four months in-

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[*] A description of the PNPTP curriculum may be obtained by writing to the author at the address appearing at the end of this article.

The Pediatric Nurse Practitioner Training Program at Washington University School of Medicine is one of the first programs to become operational in the United States and is the first program to be developed in Missouri. The author prepared this comprehensive report in response to requests for information concerning the successful development and experience of the program, which is now in its fourth year. Information includes selected characteristics of the students and the services they can provide for the pediatric population. A description of the curriculum is available upon request. Dr. Kahn is from the Division of Health Care Research and Department of Pediatrics at Washington University. This program was supported initially by grants from the W. K. Kellogg Foundation and the Metropolitan Life Insurance Company.

cludes 256 hours of formal lectures, seminars, case presentations and demonstrations accompanied by approximately an equal amount of time spent in closely supervised clinical experience. The trainee works with outpatients in both general and specialty areas, in the offices of private pediatricians and on the wards. Work in well-baby and maternal and infant care clinics are included. Heavy emphasis is placed on history taking and the physical examination (including the use of the ophthalmoscope, otoscope and stethoscope). The common problems of general pediatric practice are presented, including the child's psycho-social development.

The second four-month period is a practicum period during which the trainee may select three from among several areas of pediatric activity. For example, the student may choose to spend periods of five or six weeks in the following settings: a neonatology unit, the office of a private pediatrician, the outpatient department of St. Louis Children's Hospital or St. Louis County Hospital, well-baby or maternal and infant care clinics, neighborhood health centers or chronic disease clinics at St. Louis Children's Hospital.

Beginning in 1971, nurses entering the program with the sponsorship of an existing or future employer have been given the option of taking the practicum at the place of future employment. This allows a trainee to reduce the time of unemployment to four months and permits a lower tuition as well. Five of 16 trainees have exercised this option.

We believe this full-time program has two basic advantages over those which provide on-the-job or part-time training. First, the future PNP may be called upon to deliver pediatric services in a wide variety of settings requiring a broad range of knowledge and skills such as are included in the four-month didactic training period. The four month practicum provides the supervised experience which the trainee frequently requires for the development of maturity and confidence in practice. The practicum is of particular value to the nurse who is not a sponsored trainee and who may be employed in areas where close pediatric supervision is not available. Second, the PNP must acquire a new image of himself or herself as a health professional, functioning as an *associate* to the physician rather than in the former role as an *assistant* or even as an *aide* merely carrying out the physician's direct instructions or orders.

The term, *associate,* as applied here, indicates a nurse who has attained through educational background the competence to assume direct responsibilities for patient care. This includes independent decision making within specific guidelines as established by the physician with whom the nurse works. Such associates are accountable and assume responsibility for their actions.

The *assistant* represents an individual whose training enables her to perform certain tasks with relation to pediatric patients which are directly controlled and directed by the physician. Such actions do not require independent decision making and the assistant is not required to assume direct responsibility for her actions. The assistant carries out delegated tasks only.

An *aide* is an individual who has relatively little training other than that required to carry out specifically defined tasks which are relatively unskilled in nature. The aide works under the direction of either the physician or the associate or assistant.

In addition to the previously indicated description and guidelines relating to PNP's, the American Academy of Pediatrics and the American Nurses' Association have clearly defined the role and training required of Pediatric Assistants and Pediatric Aides.[3]

Role and Competency

Following completion of the course, the PNP can do the following:

1. Take a complete pediatric history and record it properly, organize the information for

problem solving and report the history properly.

2. Do a complete physical examination, including the use of a stethoscope, ophthalmoscope and otoscope. The PNP should be able to record the findings and evaluate them in terms of whether or not a significant abnormality is present and be able to report these findings accurately.

3. Evaluate the developmental status of an infant or child.

4. Provide complete well-baby and well-child care.

5. Recognize and manage specific minor problems of infants and children which do not require the attention of the physician. These include simple feeding problems of infants, variations of normal patterns of behavior and minor difficulties due to mild self limiting illnesses such as the common cold.

6. Counsel parents of children with chronic illness.

7. Recognize when patient's problems are beyond his or her capabilities and refer such patients to the physician.

8. Carry out a predetermined immunization program.

9. Provide anticipatory guidance for child rearing.

10. Identify health resources in the community.

11. Carry out home or hospital nursery visits to assess the status of the patient and report the findings to the physician.

The PNP does not do the following:

1. Make a specific diagnosis.

2. Prescribe medication which requires a prescription.

3. Function as an independent practitioner without the association of a physician.

Putting it another way, the PNP cannot and does not practice medicine. The PNP's skills represent extended nursing activities, and competence in the performance of these activities is at least equal and often superior to that of the physician. The PNP does not act as the substitute for the physician but, rather, relieves the physician of those tasks which more closely relate to nursing.

Employment

A PNP can function effectively wherever ambulatory pediatric services are provided. Examples include the offices of private pediatricians, neighborhood health centers, pediatric outpatient departments and emergency rooms, pediatric specialty clinics, well-baby clinics and other public health facilities as well as the practices of family physicians in urban and rural areas.

At the time of this writing, the third group of our program's trainees had completed the program. Two graduates are in transit to new homes and have not yet had the opportunity to seek employment. With the exception of the family physician's office, the others are employed in one of the settings described above.

Economic Aspects

The usual starting yearly salary in the metropolitan St. Louis area has been $10,000. Whether the PNP represents a financial reward or deficit to the individual pediatrician employer will depend on how the practice is organized after a PNP is added to the staff. Yankauer *et al*[4] have indicated that the pediatrician may reduce the burden of too large a practice by reassigning services the PNP can deliver. This allows the pediatrician to work at a more measured pace and in a more satisfying fashion but one which may result in some lowering of income. Conversely, the physician may elect to increase the practice by shifting to the PNP some of the tasks he had previously provided with consequent increased capacity to assume additional medical functions. This physician will work at the same level of intensity as before but with modification of the kinds of work performed and with net increase in income. Obviously, the pediatrician may elect to reorganize the new practice into a form which lies somewhere between these two examples.

Acceptance of the PNP

The scope of this paper does not permit a detailed review of various studies describing the acceptance of the PNP by patients and physicians. However, there is mounting evidence[4–9] that the PNP can function successfully in the role for which he or she was trained and is being accepted as a member of the pediatric health care team. Mothers are pleased with the services provided by the PNP's and physicians who have worked with PNP's consider them a most valuable addition to their practice.

Within organized medicine, there has been strong support for allied health personnel in delivering medical care, particularly in relation to the primary care physician, such as the pediatrician, internist or family physician. This has been especially true of the American Academy of Pediatrics.[3] The American Medical Association also has supported the concept of the physician delegating tasks to physician support personnel.[10] Likewise, the committee appointed by the Secretary of Health, Education and Welfare, a committee representing medicine, nursing and public health, has strongly recommended the extension of the role of the nurse into areas of primary care.[11]

Legal Issues

Major concerns about the professional functions of PNPs involve legal issues. Is the PNP entitled under law as a registered nurse to provide those various services described above? Is the PNP truly engaged in the practice of nursing or is he or she practicing medicine? Who is responsible legally for the action of the PNP?

These questions become crucial as more nurses assume increased responsibilities in pediatrics and in other fields of health care. The opinion held here is that all services described for the PNP are encompassed by nursing certification. Further, with the exception of formal history taking and the physical examination, virtually none of the skills of the PNP are really new to nursing. Nurses have been delivering these kinds of health services via instruction by a physician employer or generated from long experience. The PNPTP organizes the teaching of these skills in a proper and structured fashion and, by certification, encourages professional as well as public recognition of such trained nurses. The nurse is an established and licensed member of the health profession. With the medical profession recognizing the propriety of the services she provides, there would seem to be little reason to question the legality of his or her activities. The PNP shoulders responsibility for his or her performance as does any R.N. carrying out instructions under the supervision and direction of a physician. These actions also are the responsibility of the physician who has directed that they be performed.

Cost of the Training Program

Based on costs of faculty time, equipment and supplies, the cost of training a PNP is approximately $4,000 per student; the tuition of $1,760 for the eight-month program falls far short of that. This figure compares to estimates by Yankauer's group[12] who have suggested an institutional cost of $1,756 per PNP for a part-time program involving considerably less time. While the cost of training may seem high, the cost benefit also is rather large. In a relatively short time and for a relatively smaller expenditure, it is possible to expand the ability of a nurse to provide care for children who ordinarily would require the costlier skills of a physician whose training is more complex and more expensive.

Evaluation

Assessment of the trainee's performance is based on the observations of the instructors and preceptors who consider the trainee's fund of knowledge, skills, clinical judgment, initiative, sense of responsibility and attitudes toward patients, supervisors and colleagues. Neither oral nor written examinations are given. This follows the procedure used in evaluating house officers and others engaged in postgraduate training programs at this institution.

Weekly group meetings are held with the program director, and individual interviews relating to the student's progress are held at the midpoint and end of the didactic period and the practicum. Other interviews are held whenever desired by the trainee or program director.

Other Considerations

After three years, the pediatric faculty as well as the nursing community has maintained a high level of interest in the PNPTP. Certain factors can be identified which have had influence on the warm reception which the program has enjoyed. Not the least of these is the enthusiasm and interest of the trainees themselves. With suggestions and helpful criticisms, they have been the strongest influence in the creation of a steadily evolving, rather than a static, curriculum.

Consideration should be given to the process of organization and operation of this program within the Medical School. Among the more gratifying experiences attendant to the institution of the PNPTP at Washington University School of Medicine has been the singular lack of serious difficulty in the inauguration of the program. It has been warmly received by the faculty of the Department of Pediatrics, including many full-time members as well as many of those in private practice. The fact that the Department of Pediatrics, as well as the other involved faculty personnel, endorse the philosophy of the program contributes to its successful operation. As expected, there were obstacles. It was necessary to assure occasional individuals in various administrative roles that the PNP is an important member of the pediatric health care team. Some pediatricians expressed disinterest or concern which was not changed by discussion, and such individuals did not participate. However, skepticism and disapproval were at a relatively low level and are becoming less and less evident. It is to be reemphasized that only people who believe in the program have been participants.

SUMMARY

The PNPTP of Washington University School of Medicine is in the fourth year of operation. Experience has indicated that the PNPTP is well received by the enrollees who have found it a means to extend the role of the registered nurse in ways which are more appropriate to their capabilities. The design of the program is presented and various factors which are involved in the development and continued administration of such a program are described.

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Reprints: Lawrence Kahn, M.D.
Washington University School of Medicine
Division of Health Care Research
4566 Scott Ave.
St. Louis, Missouri 63110

Volvulus of the Stomach

(Continued from page 657)

ture. Two types of volvulus, organo-axial and mesentero-axial, have been described. Prompt radiological examination will establish the diagnosis when the clinical symptoms are not characteristic. Early surgical intervention should reduce mortality in acute cases.

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The 14th National Conference on Physicians, Schools and Communities will be held at the LaSalle Hotel in Chicago on October 4-5. Theme of this year's meeting is "Improving the Quality of Life: The Impact of Schools." The meeting will provide a forum for medical societies to exchange ideas and activities related to the health of school-aged children and youth.

Special X-Ray Exhibit

SIDNEY RUBIN, M.D., RODGER LAMBIE, M.D. *and*
EDWIN HERMAN, M.D., ***Kansas City***

Radiologic Problem Case

THIS 54-YEAR-OLD WHITE WOMAN was admitted to the hospital for evaluation of gastrointestinal complaints which were of a chronic nature. Over the years, the patient's condition had been diagnosed as "spastic colitis." The problem appeared to oscillate between diarrhea and constipation with protracted periods of obstipation. In the past weeks, the patient stated that the diarrhea had worsened and was associated with cramping pain as well as tenderness in the right lower quadrant.

Past History: The patient had had the usual childhood diseases. A tonsillectomy was performed at three years of age. She had a total hysterectomy for uterus prolapse in 1947. A tumor diagnosed as fibrocystic disease was excised from the left breast in 1942.

Family History: The patient's mother is alive but has had similar colon complaints, which also were diagnosed as a *spastic colon*. The patient is a chronic smoker (three to four packs of cigarettes per day for approximately 30 years).

Physical Examination: The patient's height is 5 feet 8 inches and she weighs 175 lb. Her temperature was 98 F; pulse, 72/min; respirations, 20/min; and blood pressure, 120/70.

The patient was in no acute distress in spite of complaints. There was exquisite tenderness centered about the right lower quadrant. A small scar was seen on the left breast. The hysterectomy had been accomplished by the vaginal approach.

Laboratory Data: Normal SMA 12. Normal prothrombin time. The red blood cell and white blood cell counts were normal. The sodium, chlorides and CO_2 were within normal limits with potassium at the lower limits of normal 3.8 (normal 3.9-4.8). The EKG was normal.

A barium enema was performed on May 13, 1972 (Fig. 1). The colon was negative except for the ileocecal valve region. Here a somewhat rigid radiolucent defect was demonstrated along the medial aspect of the ascending colon. Barium was forced into the ileum in the presence of marked pain and discomfort. The ileum was seen to traverse the lower border of the radiolucent mass suggesting an eccentric positioned lumen of the small bowel at the ileocecal valve lips.

The lack of complete filling of the terminal ileum and the inability of the patient to cooperate satisfactorily for this examination demanded further roentgen exploration. This was accomplished by the small intestinal route, which was supplemented with fluoroscopy and spot films. The oral barium study was done on May 20, 1972. Spot films over the ileocolic region reconfirmed the barium enema observations (Fig. 2). The prominent and persistent defect involving the medial aspect of the colon at the ileocecal valve lips and the eccentric channel of the lumen between the valves raised a warrantable suspicion of organic disease at this point. In addition, the distal ileal loop appeared slightly dilated and ineffective in emptying barium into the colon, although the peristaltic activity appeared quite vigorous.

The inferior and superior borders of the valves were unalterable and were rounded or convex at the junction of valve and colon wall medially.

The above findings favored carcinoma as an explanation for the clinical and roentgen observations.

Discussion: In the majority of cases, the cecum will manifest roentgen changes which are characteristic of specific pathology. Occasionally, an atypical observation is encountered which renders the diagnosis difficult if not impossible.

This is due to the fact that a roentgen obser-

The authors of this series of articles presenting unusual radiologic problem cases are from the Department of Radiology, Menorah Medical Center, where Dr. Rubin is Chairman. They were assisted in this case by Frank Mantz, M.D., Pathologist.

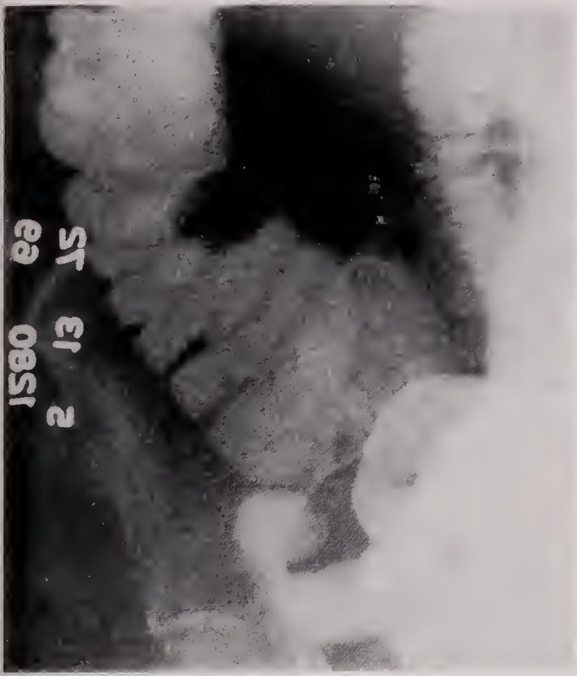

Fig. 1 The ileocecal area is viewed on a posterior projection of a barium enema study. The prominent radiolucency of the valve lips and the downward slope of frenulum (the channel between upper and lower valve) are eccentric and curvilinear rather than straight and beak-like.

vation, such as filling defects, attempts to define a mass or space-taking lesion in radiological terms, although pathology may be simulated by physiological and morphological variations of the organs in question. When this situation arises and the differential diagnosis between disease and an altered anatomical state exists, all the conventional radiographic studies may not resolve the problem.

In the main, the barium enema is the preferred method for studying the ileocecal valve and terminal ileum. Inability to cause barium to reflex through the ileocecal valve is not indicative of disease but, rather, denotes a competent valve (Fig. 2). If one is suspicious of disease in this region, an oral study is necessary to study the ileum and ileocecal valve from above. The variations in the appearance of the ileocecal valve are myriad so that position, shape and thickness of the valve can challenge the most experienced radiologist.[1] Thus, one may be called upon to use every technique that can be mustered to aid in deriving a specific diagnosis. There have been occasions in our experience when a most suggestive tumefaction of the valve lips has turned out to be normal valves at

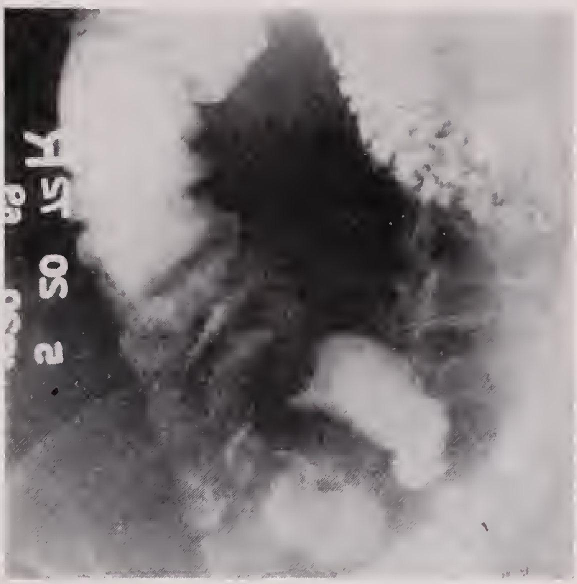

Fig. 2 Interval studies made one week following the barium enema revealed the indurated radiolucency which was not effaceable. The small segment of terminal ileum entering the colon appeared distended and the lips were not centrally positioned. The lumen of the valve area is convex downward.

the time of surgery. Antegrade and retrograde prolapse of the ileocolonic mucosa adds further to the distortion of this opening and often masquerades as a neoplasm. The hypertrophy[2] of the valve lips has been described and concern for the asymmetrical channel between the upper and lower valve lips has been considered as an important sign (Fig. 1) that favors a carcinomatous lesion about the valve.

Lipoma of the submucous type may lie beneath the valves and cause ulceration and intussusception of the ileum into the colon. It was our feeling that the induration of the lesion favored a carcinoma, particularly since the lumen was eccentric and the defect could not be obliterated regardless of the method of examination.[3]

Radiological Diagnosis: Carcinoma of valve lip.

Differential Diagnosis: 1. Hypertrophy of valve. 2. Lipoma of valve. 3. Idiopathic inflammatory process involving valve lips.

Pathology

Gross: A doughnut-shaped, rounded mass of tissue said to represent an amputated ileocecal valve was received in the fresh state. It measured 4 cm x 3.5 cm in greatest diameter and does not exceed 1.5 cm in thickness. The lumen of the valve was eccentrically located on the epithelial surface. Its greatest diameter was 1 cm x 1 cm. It was completely patent, although it appeared slightly constricted. The opposite or excisional aspect consisted of adipose tissue. The lumen of the valve was 1.5 cm in length. Cross sectioning showed adipose tissue. Also received was an elongate finger of yellow fat, which was 6 cm x 1 cm x 0.8 cm. It was felt to represent the appendix epiploica. The specimen submitted from the incidental appendectomy showed a normal appendix.

Microscopic: The ileocecal valve showed some irregular interstitial hemorrhage on the colonic mucous membrane. The lumen is lined at least in part with ileal type mucous membrane within which there is a large Peyer's patch. Located in the submucosa is a diffuse mass of multilobular adipose tissue lying for the most part beneath the muscularis mucosa and extending in a narrow strand.

Pathology Diagnosis: Submucosal lipomatosis of the ileocecal valve.

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Continuing Education Coming Events

Sept. 7	**Seminar on Emergency Medicine** Missouri Chapter, American College of Emergency Physicians Chase-Park Plaza Hotel, St. Louis
Sept. 8	**Annual Seminar on Industrial Injuries of the Hand** Milliken Hand Rehabilitation Center East Pavilion Auditorium, Barnes Hospital, St. Louis
Sept. 14-15	**The Long Weekend: Hypertension, Renal Disease** University of Missouri-Kansas City, Kansas City Southwest Clinical Society, Missouri Regional Medical Program and The Academy of Health Professions Crown Center Hotel, Kansas City
Sept. 18-19	**Seminar on Therapeutics: Management of Blood Problems in Daily Practice** University of Missouri-Kansas City, Kansas City Southwest Clinical Society, Missouri Regional Medical Program and The Academy of Health Professions Alameda Plaza Hotel, Kansas City
Oct. 12-13	**M.D. Day** University of Missouri-Columbia School of Medicine Columbia
Oct. 25-27	**Fall Conference** Kansas City Southwest Clinical Society 2200 Holmes, Kansas City

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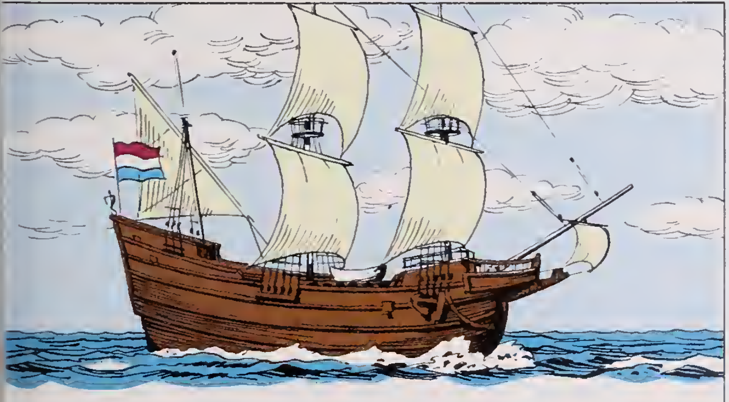

RONSSENS, A DUTCH PHYSICIAN, WROTE IN 1564 THAT "DUTCH SAILORS WHO, RETURNING FROM SPAIN, WERE ATTRACTED BY THE NOVEL RICHNESS OF THE FRUIT (ORANGES) AND BY THEIR GREED AND GLUTTONY, UNEXPECTEDLY DROVE OUT THE DISEASE (SCURVY), AND HAD THIS HAPPY EXPERIENCE NOT ON A SINGLE OCCASION ONLY, BUT REPEATEDLY."

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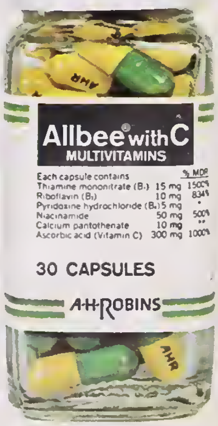
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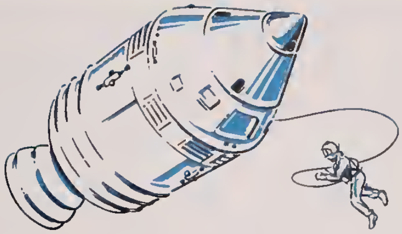

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President's Message

Following each Session of the Missouri General Assembly, we physicians wonder "what have they done" in Jefferson City that affects our practice of medicine.

The recently adjourned 77th General Assembly DID pass legislation affecting medicine. I hasten to add, however, that the new laws must be regarded as favorable. Fortunately, all of the legislation opposed by the MSMA during the last Session failed to gain approval, with the exception of the Blue Cross-Blue Shield regulatory bill.

E. A. Stricker, M.D.

Nine new laws which passed the Legislature and have been signed by the Governor could have a direct effect on Missouri physicians. At a glance, these measures are:

- Relieve physicians of liability for actions taken by medical review, hospital review or other review committees of which they are members, if the actions were taken without malice and after efforts to establish the facts.
- Remove smallpox from the list of *mandatory* immunizations required for public school pupils.
- Establish a Medical Examiner System in Greene and Clay Counties and provide other counties with the option to adopt the system.
- Provide for licensing and regulation of ambulances, drivers and attendants by the Division of Health. This bill contains a "Good Samaritan" clause and a provision for "Mobile Emergency Medical Technicians" who may perform certain emergency services "at the scene of an accident, in an ambulance or at the emergency room of a licensed hospital."
- Allow qualified embalmers to enucleate eyes which have been donated by the deceased.
- Require pharmacists or a physician to place the exact name and dosage of a prescribed drug on every container label, unless otherwise directed by the physician.
- Establish a Bureau of Home Health Care Services for the Aged and Chronically Ill within the State Division of Health.
- Provide that no physician, allied personnel or hospital is required to treat or admit any woman for the purpose of abortion if such treatment is against the policy of the hospital or against the religious, moral or ethical principles of the medical personnel.
- Require licensing of hearing aid dealers. Those persons 18-years-old or younger must see a physician before a fitting.

The MSMA Legislative Committee and its chairman, John I. Matthews, M.D., are to be congratulated for guiding the passage of favorable bills while successfully derailing several anti-medicine measures during the recent Session. But it is time to look ahead, not behind.

With the advent of annual sessions of the General Assembly, the burdens placed on the Legislative Committee and Staff have increased significantly. To continue an effective legislative program, more MSMA members must become involved!

Assess the importance of legislation in regard to your profession. If you can offer much-needed, local contact with your State Senator or Representative on medically-related bills, contact John I. Matthews, Chairman, Legislative Committee, in care of MSMA Headquarters.

Remember, the second session of the 77th General Assembly convenes on Jan. 9, 1974.

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Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

PRECAUTION: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

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★ TEL-E-MEMBER

You will recall that in the June issue of Missouri Medicine, I discussed the inspiring new *Five Point Tel-Star Program* which the Woman's Auxiliary initiated this year in an effort to increase our service opportunities.

★TEL-E-MEMBER is the first point on that star. It relates to increasing our *membership,* a subject we take very seriously. It is so important that we gain the interest and memberships of many doctors' wives who have yet to join the Auxiliary. We believe that we can all work together in membership by offering the AMA slogan, "Join us! We can do much more together!"

We believe that in membership, the single, most effective tool is verbal communication on a one-to-one basis. The *fact* is that our goal is for every qualified physician to be a member of the AMA and his wife to be a member of the AMA Auxiliary. The *problem* is that many in these eligible groups are not members now. We want them to be aware of (1) our existence, (2) what we do to make a better way of life for everyone and (3) our attitude—we want and need them as members.

Mrs. Charles R. Willman
President

The MSMA Auxiliary is now striving for a strong Membership Committee in each county medical society auxiliary. The membership committees should have a membership chairman and co-chairman, hospitality chairman, program chairman, telephone chairman, project or program development chairman and treasurer. You can see how the responsibilities of each chairman will relate to contacting prospective members; making them feel welcome by extending the hand of friendship and fellowship; capturing their interest via informative and worthwhile programs; and gaining the advantage of their talents, ideas and participation in developing constructive, meaningful projects based on the health needs of the individual communities.

One of the most invigorating and exciting aspects of the MSMA Woman's Auxiliary and the AMA Auxiliary is that our programs are not static and each county auxiliary can be responsive to the particular health needs in its community. Our county auxiliaries can literally "come alive" with vision, imagination, planning, enthusiasm and action.

We do need help in getting this important message to physicians' wives who are not members now. With the new members we expect to gain, each of our county groups can be of greater service to the MSMA and the communities in which we live.

"Whatever you can do, or dream you can, begin it. Boldness has genius, power and magic in it."—Goethe.

EDITORIAL

ART AND SCIENCE IN MEDICINE

The art of medicine may have been stressed unduly in the past and is still emphasized by many older physicians with a nostalgic yearning for its past contributions. "A science teaches to know, and an art to do." (Jevons)

There is obvious tense drama in the famous impressive painting by Sir Luke Fildes showing the physician sitting beside the sick child and observing its every breath most carefully and anxiously, as diphtheria take its toll. Inherent too, however, is the deep frustration in just sitting there and being able to do so little; in that sense, it is a sad and maybe too dramatic depiction of the helplessness of the physician. The lesson is crystal clear, art itself is just not enough!

At the opposite pole is the totally objective approach—giving the calculated dose of antitoxin without any special tender loving concern for the sick child and anxious parents; but the child recovers. Does that mean that science is triumphant and the art of medicine is passé? Are the intangible emotional imponderables no longer important in medical care? Cannot the antitoxin be given with prayerful compassion too? The fact is that the art of medicine, although not so easily measurable and quantitative, statistical and "reportable," is still important and may be more so now than ever before. Man needs sympathetic understanding; the toll of lack of sympathy is great and can lead to callous, impersonal, and even harmful "care."

The difficulty arises out of the present tendency—a growing one—of contrasting art and science in medicine as if they were antagonistic. In truth, it should not be art versus science in medicine but rather art and science—in parallel, in symbiosis, both together affecting the cure of the body and the soul and achieving balanced health with permanent homeostasis and adjusted happiness.

Let us foster the art of medicine and promote its science too, together; there is a desirable proper balance between them for the best of medical care. One does not belittle the other, and there is no need to denigrate one for the sake of the other. Both can make an important contribution. Both are needed, much needed, to help troubled humanity in this troubled world.

With impersonal government and hospital controls of medical care ever increasing, it is only the physician who can properly balance the art and the science of medicine; he will be increasingly important in obtaining the best complete medical care for the patient.

New York State Journal of Medicine
July 15, 1973

LETTERS to the Editor

Joseph V. Finnegan, M.D., Editor
Missouri Medicine

Dear Dr. Finnegan:

Public Law 92-603 provides the Department of Health, Education and Welfare (HEW) with the mandate to administer those portions of the law that pertain to Professional Standards Review Organizations (PSRO).

The Office of Professional Standards Review has been established in the Office of the Assistant Secretary for Health to direct and coordinate all Departmental PSRO-related activities. Its Director is William I. Bauer, M.D. In carrying out these responsibilities, Dr. Bauer and his staff will be working with the National Professional Standards Review Council and with State and local organizations which are involved in establishing and implementing professional standards review mechanisms. In addition, many other HEW personnel will be assisting in this work, including staff of the Medicare and Medicaid programs.

During the coming months, the Office of Professional Standards Review, in collaboration with the HEW Regional Offices and involved agencies, will develop a variety of informational and technical material which will guide and facilitate the eventual selection, designation and operation of PSROs throughout the Nation. As a part of the process, interested individuals and organizations will be asked to contribute to the development of material regarding PSRO regulations, norms, criteria and related items. This material will be made widely available to organizations which may elect to apply for PSRO designation, as well as to other groups and individuals whose interests and activities relate to current and future PSRO concerns.

Requests for further information and other communications regarding PSRO and related peer review issues should be addressed to:

William I. Bauer, M.D.
Director, Office of Professional
Standards Review
Department of Health, Education,
and Welfare
Washington, D. C. 20201

I invite your assistance and participation in this important new, nationwide effort.

Sincerely yours,
Charles C. Edwards, M.D.
Assistant Secretary for Health
Department of Health, Education
and Welfare

Charles C. Edwards, M.D.
Assistant Secretary for Health
Department of Health, Education and Welfare
Office of the Secretary
Washington, D. C. 20201

Dear Dr. Edwards:

Dr. Joseph V. Finnegan, editor of MISSOURI MEDICINE, has asked me to respond to your letter under the date of May 7, which was addressed to him as editor.

Your letter will be published in our "Letters to the Editor" section of MISSOURI MEDICINE in an attempt to secure further cooperation from our members in the efforts to implement the PSRO law.

I am sure you realize that this will be a trying time for the Medical Profession. Fortunately in Missouri, the Missouri State Medical Association and the Missouri Association of Osteopathic Physicans and Surgeons joined together in 1970 to create a nonprofit corporation, separate and distinct from both state organizations, known as the Health Care Foundation of Missouri. This Foundation has been implementing for almost three years now its goals of doing true peer review throughout the state of Missouri in an effort to elevate the quality of medical care; to identify abuses and educational needs throughout the health care delivery system, both as relates to providers, consumers and carriers; and to control the cost of medical care.

Needless to say, in Missouri as well as other parts of the country, there has been considerable dissention on the part of many physicians as to the validness of this effort, and particularly to the validity of attempting to implement the PSRO law. Fortunately, these people are in the minority—but a significant minority, I might add.

We in Missouri feel very strongly, and both the State Medical and State Osteopathic organizations have gone on record as endorsing, that the Health Care Foundation is the organization we would like to see conduct and monitor the PSRO in Missouri. The Health Care Foundation of Missouri is regionalized, with local peer review being done in each of the regions. We currently have over 250 actively practicing physicians working at this effort in various parts of the state. We are very strongly dedicated to the proposition that in order for statewide peer review organizations to function, there has to be a central umbrella organization to monitor the activities of all the PSROs within the state, to coordinate their efforts, to act as an appeal body, to help identify and implement the educational needs as they are discovered, to establish and maintain proper computer facilities for the ongoing peer review activities and to be in a position to represent all of the physicians in Missouri in negotiating appropriate contracts with the Secretary of HEW in carrying out the law.

It is quite apparent to all of us who have spent a great deal of time in developing this activity that peer review and PSRO organizations can never survive and be successful without the cooperation of the Medical Profession. It should be equally apparent that the best way to get this cooperation will be to find out from doctors in various parts of the country what in their estimate will work best in their area, and be prepared to accept such structured organizations with possible revisions in order to gain that cooperation.

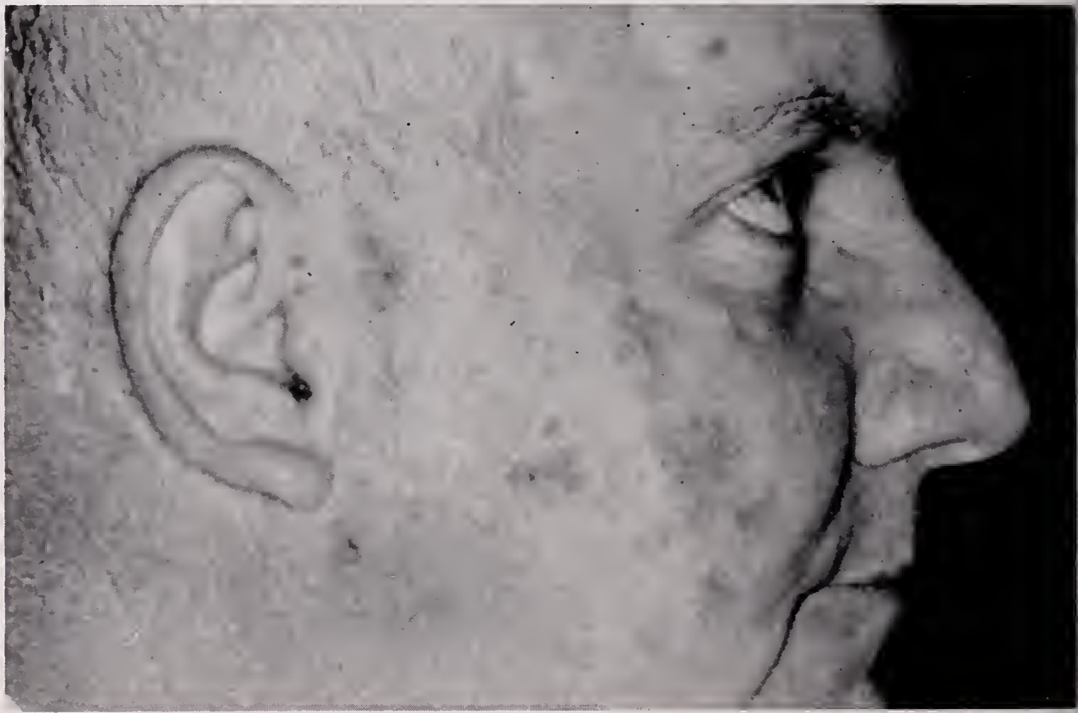
Sincerely yours,
Hector W. Benoit, Jr., M.D., Chairman
The Health Care Foundation of Missouri

Take stock in America
Buy U.S. Savings Bonds & Freedom Shares

What's on your patient's face...

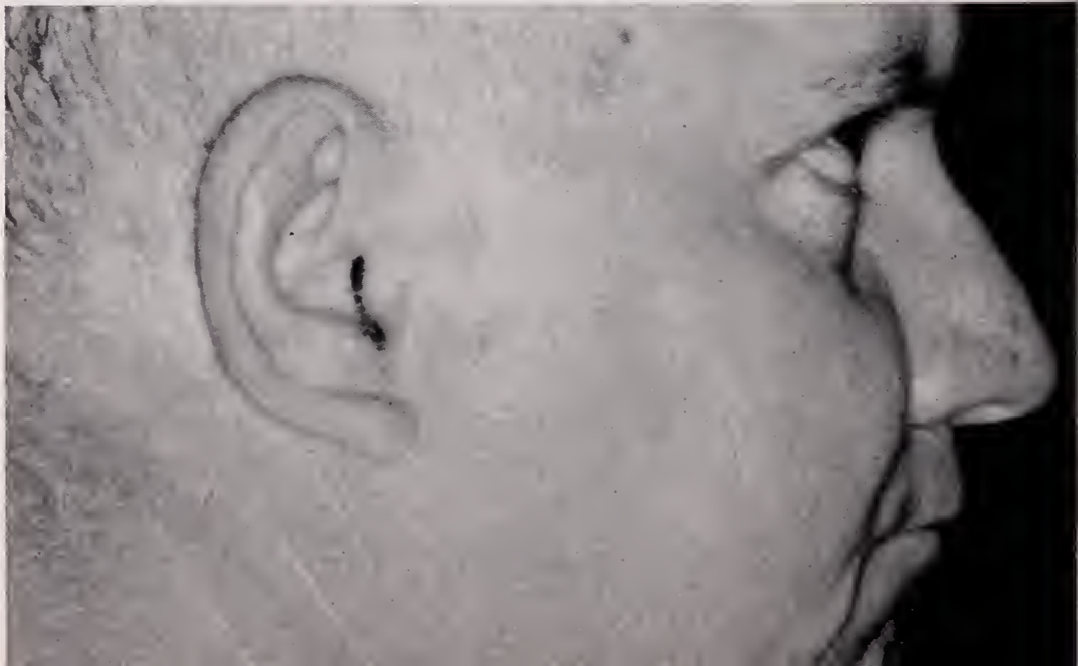
may be more important than his chief complaint

Patient P.T.* seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual scarring on ridge of nose from previous cryosurgical and electrosurgical procedures.



Patient P.T.* seen on 6/12/67, seven weeks after discontinuation of 5% FU cream. Reaction has subsided. Residual scarring not seen except that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.

*Data on file, Hoffmann - La Roche Inc., Nutley, N.J



he lesions on his face
re solar/actinic–
-called "senile" keratoses...
nd they may be premalignant.

lar, actinic or senile keratoses

se lesions may be called by several names, but they
lly can be identified by the following characteris-
The typical lesion is flat or slightly elevated, of a
vnish or reddish color, papular, dry, rough, adherent
sharply defined. They commonly occur as multiple
ns, chiefly on the exposed portions of the skin.

quence of therapy–
ectivity of response

r several days of therapy with Efudex® (fluorouracil),
hema may begin to appear in the area of the lesions;
reaction usually reaches its height of unsightliness
discomfort within two weeks, declining after dis-
inuation of therapy. This reaction occurs in affected
. Since the response is so predictable, lesions that
t respond should be biopsied.

ceptable results

tment with Efudex provides highly favorable cos-
c results. Incidence of scarring is low. This is par-
arly important with multiple facial lesions. Efudex
ld be applied with care near the eyes, nose and mouth.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)-aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

his patient's lesions were resolved with
Efudex®
luorouracil/Roche®

5% cream/solution...a Roche exclusive

In Memoriam

George A. Aiken, M.D., 917 S. Odell Ave., Marshall, a graduate of the University Medical College, Kansas City, 1911; member of Saline County Medical Society; age 85; died June 18, 1973.

Lawrence E. Cooper, M.D., 1274 Hanton Ave., Fort Meyers, Fla., a graduate of Tulane University, 1915; member of Pemiscot County Medical Society, age 83; died June 25, 1973.

Arthur W. Neilson, M.D., 35 N. Central, Clayton, a graduate of St. Louis University, 1938; member of St. Louis Medical Society; age 66; died July 8, 1973.

Gustave Dahms, M.D., 1452 S. Grand Blvd., St. Louis, a graduate of St. Louis University, 1917; member of St. Louis Medical Society; age 80; died July 9, 1973.

Herbert W. Frerking, M.D., 5535 Delmar Blvd., St. Louis, a graduate of Washington University, 1942; member of St. Louis Medical Society; age 57; died July 11, 1973.

Edward E. Mansur, M.D., 519 S. Carolina Dr., Stuart, Fla., a graduate of St. Louis University, 1910; member of Cole County Medical Society; age 82; died July 16, 1973.

James B. Jones, M.D., 9335 Sonora Ave., Brentwood, a graduate of Washington University, 1938; member of St. Louis Medical Society; age 62; died July 20, 1973.

Henry C. Sweany, M.D., 3108 Wills, Smyrna, Ga., a graduate of Rush College, 1921; member of Ozarks County Medical Society; age 82.

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MISSOURI MEDICINE

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When the local representative calls, tell him you saw his company's ad in your journal.

PRESCRIBING INFORMATION

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.

ROERIG Pfizer

A division of Pfizer Pharmaceuticals
New York, New York 10017

Clean sweep

PINWORMS 0
ROUNDWORMS 0
STAINS 0
ARTHUR

with a single dose of Antiminth

(pyrantel pamoate) ORAL SUSPENSION

Highly effective against inworm and roundworm

Non-staining to teeth r oral mucosa on ingestion, to tools, clothing, linen

Simple dosage with a ingle-dose regimen: 1 cc. per 0-lb. body weight (1 tsp./50 lb.; aximum dose, 4 tsp.)

Well-tolerated, based on clinical studies*

Pleasant-tasting, easy-to-take, caramel-flavored oral suspension

Economical, because one prescription can treat the entire family

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

ANTIMINTH®
(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml.
ORAL SUSPENSION

While Antiminth is highly effective against pinworms and roundworms, the illustration is not meant to imply 100% efficacy.

*Data on file at Roerig.

Please see prescribing information on facing page.

POWELL & HYDE Sts
513
SAN FRANCISCO MUNICIPAL RAILWAY

Antivert®
(meclizine HCl)
for vertigo*

...and then on to Venice

ndicated in the management of nausea,
niting and dizziness associated with mo-
ı sickness.

ound useful in the management of verti-
ssociated with diseases affecting the ves-
ılar system.

vailable as Antivert® (12.5 mg. meclizine
l) blue and white scored tablets and also
ntivert®/25 (25 mg. meclizine HCl) yel-
and white scored tablets.

NDICATIONS. Based on a review of this drug by
ne National Academy of Sciences-National Research
ouncil and/or other information, FDA has classified
ne indications as follows:
Effective: Management of nausea and vomiting and
izziness associated with motion sickness.
Possibly Effective: Management of vertigo asso-
iated with diseases affecting the vestibular system.
Final classification of the less than effective indica-
ons requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12th-15th day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

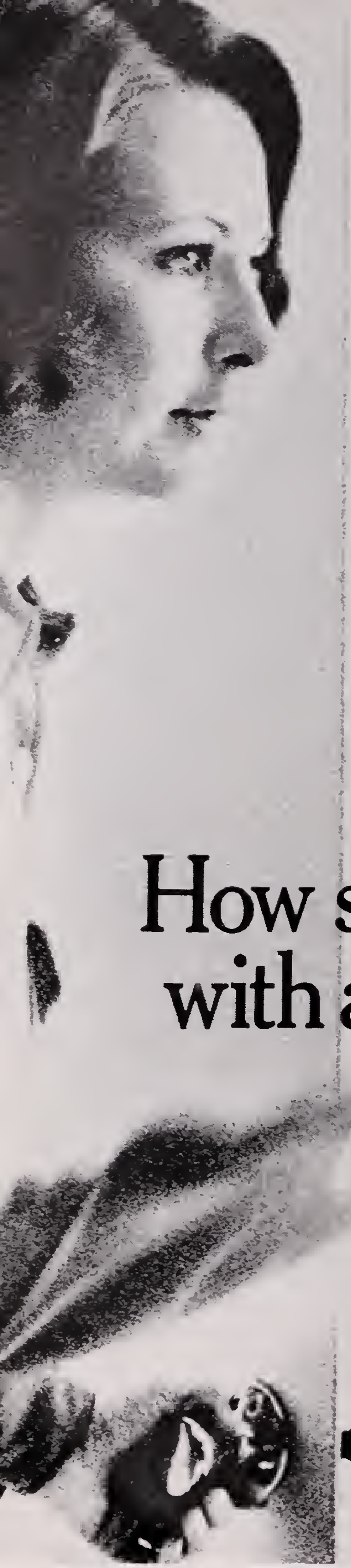
WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York [illegible]



Success in preventing recurrence of urinary tract infection usually depends on success in treating the initial infection. And that in turn is closely linked to factors of proper drug, proper dosage, and *proper length of therapy*. Much of the effectiveness of an antibacterial agent used to treat an acute nonobstructed urinary tract infection depends, in fact, upon proper length of therapy. As you know, it is potentially hazardous for a patient to discontinue her medication too soon; on the other hand, overtreatment has no advantage and may even cause adverse reactions.

Total therapy: 14 days

Some recent studies suggest that therapy in acute nonobstructed urinary tract infections should be continued for 10 to 14 days even if patients become asympton in 2 or 3 days, as they often d After inadequate treatment, course, survival of bacteria c cause a quick recurrence of infection.

The problem of persua a patient to complete the full course of therapy remains di cult. Perhaps agreeing on th for a follow-up examination a end of medication may be th most effective way of convin a less than enthusiastic patie to continue therapy even afte becomes asymptomatic.

As a urinary antibacter Gantrisin (sulfisoxazole) Ro offers your patient importan vantages, some of which ma increase patient cooperation

High urinary and plasma le

Therapeutic urinary and plas concentrations are usually

How soon will she drop in with a recurrent cystitis...

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Nonobstructed urinary tract infections (mainly cystitis, pyelitis, pyelonephritis) due to susceptible organisms.
IMPORTANT NOTE: *In vitro* sensitivity tests not always reliable; must be coordinated with bacteriological and clinical response. Add aminobenzoic acid to follow-up culture media. Increasing frequency of resistant organisms limits usefulness of antibacterial agents, especially in chronic and recurrent urinary infections. Maximum safe total sulfonamide blood level, 20 mg/100 ml; measure levels as variations may occur.
Contraindications: Hypersensitivity to sulfonamides; infants less than 2 months of age; pregnancy at term and during the nursing period.
Warnings: Safety in pregnancy not established. Do not use for Group A beta-hemolytic streptococcal infections, as sequelae (rheumatic fever, glomerulonephritis) are not prevented. Deaths reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Sore throat, fever, pallor, p or jaundice may be early indicatior serious blood disorders. CBC and u with careful microscopic examinat should be performed frequently.
Precautions: Use cautiously in pat with impaired renal or hepatic fun severe allergy or bronchial asthma ysis, frequently dose-related, may in glucose-6-phosphate dehydroge deficient patients. Maintain adequ intake to prevent crystalluria and s formation.

ed in 2 to 3 hours and can be
tained on the recommended
Gm/day dosage schedule
convenient for almost all
nts.

enerally good tolerance

isin (sulfisoxazole) Roche
s relatively few undesirable
ons, and serious toxic re-
s are rare. Minor reactions
mparatively infrequent, but
nclude nausea, headache
miting. Gantrisin may usu-
given safely, even for pro-
d periods, in the treatment
onic or recurrent nonob-
ed cystitis, pyelitis or
ephritis due to *E. coli* and
susceptible organisms.
(See Important Note in sum-
of product information.)

Complete blood counts and urinalyses, with microscopic examination, should be performed frequently.

High solubility

Gantrisin is one of the most soluble of all sulfonamides, with both free and acetylated forms highly soluble in the commonly encountered urinary pH range of 5.5 to 6.5. Urine levels have been detected in 60 minutes; therapeutic levels are usually reached in 2 to 3 hours. About 90% of a single dose is excreted in 24 to 48 hours. As with all sulfonamides, adequate fluid intake must be maintained.

Economy

Average cost of therapy is still only about 6½¢ per tablet.

References: **1.** Bran, J. L.; Karl, D. M., and Kaye, D.: *Clin. Pharmacol. Ther., 12*:525, 1971. **2.** Burke, E. C., and Stickler, G. B.: *Mayo Clin. Proc., 44*: 318, 1969. **3.** Hibbard, L. T., in Bulger, M. J., *et al.*: *Patient Care, 1*:(3)47, 1967. **4.** Holloway, W. J.; Furlong, J. H., and Scott, E. G.: *J. Urol., 102*:249, 1969. **5.** House, T. E., *et al.*: *Obstet. Gynecol., 34*:670, 1969. **6.** Lampe, W.T.: *J. Am. Geriatr. Soc., 16*:798, 1968. **7.** Moffat, N. A., and Wenzel, J. J.: *Curr. Ther. Res., 13*:286, 1971. **8.** Normand, I. C. S.: *Practitioner, 204*:91, 1970. **9.** Pryles, C. V.: *Med. Clin. North Am., 54*:1077, 1970. **10.** Seneca, H.; Peer, P., and Warren, B.: *J. Urol., 99*:337, 1968. **11.** Trafton, H. M., and Lind, H. E.: *J. Urol., 101*:392, 1969.

if she drops out of her therapy too soon?

For acute, chronic or recurrent nonobstructed cystitis, pyelitis, or pyelonephritis due to susceptible organisms

begin with

Gantrisin®
sulfisoxazole/Roche®

Usual adult dosage: 4 to 8 tablets *stat,* 2 to 4 tablets *q.i.d.*

e Reactions: *Blood dyscrasias:*
locytosis, aplastic anemia, throm-
enia, leukopenia, hemolytic ane-
rpura, hypoprothrombinemia and
moglobinemia; *Allergic reactions:*
ma multiforme (Stevens-Johnson
me), generalized skin eruptions,
mal necrolysis, urticaria, serum
s, pruritus, exfoliative dermatitis,
ylactoid reactions, periorbital
, conjunctival and scleral injection,
ensitization, arthralgia and allergic
rditis; *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; *Miscellaneous reactions:* Drug fever, chills and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L.E. phenomenon have occurred. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Supplied: Tablets containing 0.5 Gm sulfisoxazo

ROCHE

Roche Laboratories
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Nutley, N.J. 07110

AMA Lists Record Number of Continuing Education Courses

A total of 2,441 courses for continuing education of physicians will be offered by 697 institutions and organizations in the year beginning on September 1, the American Medical Association reported in a special supplement to the August 13 issue of its *Journal.*

This figure compares to 2,082 courses listed in the academic year ending August 31.

Institutions and organizations sponsoring courses to help physicians keep abreast of developments in medicine are located in 48 states and the District of Columbia.

Compiled by the staff of the AMA's Department of Continuing Medical Education, the supplement is the 19th annual listing of courses.

The list of courses is published as a service to all physicians who are interested in maintaining their competence and skill through the medium of formal courses and other organized activities in continuing medical education, says C. H. William Ruhe, M.D., the AMA's Director of Medical Education.

The number of physicians recognizing the value of regular, formal study has been increasing steadily and participation in the listed courses continues to grow, Dr. Ruhe points out.

A major factor in continuing medical education of physicians is the AMA's Physician's Recognition Award, presented to physicians who successfully complete specified study programs. Some 11,000 physicians qualified for the Award in 1972, bringing to more than 40,000 the total who have met the standards under this program.

Increased utilization of the AMA Award as a nationwide base for an acceptable level of continuing medical education has occurred, Dr. Ruhe says. The AMA now receives an increasing number of inquiries about the Award from physicians with medical staff responsibilities in hospitals. These inquiries ask the AMA to verify that a physician applying for hospital privileges has a currently valid Award, or how the Award can be used as a convenient way of validating participation by all medical staff members in a personal program of continuing education.

The *Journal* supplement lists courses that are sponsored by organizations accredited for continuing education by the AMA's Council on Medical Education. Every institution and organization known to offer such courses was contacted individually and offered the opportunity to list its courses.

★

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New Members

Bernardo Aleksander, M.D., 1420 Grattan, St. Louis, has become a member of St. Louis Medical Society. Dr. Aleksander is a native of Argentina, received his preliminary education at Colegio Nacional and his M.D. degree at Universidad de Buenos Aires in 1959. He specializes in psychiatry.

France Alexander, M.D., 18 S. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Alexander is a native of France, received his preliminary education at Emerson School and his M.D. degree at Indiana University in 1953. He specializes in internal medicine.

David I. Anslinger, M.D., 5505 Delmar, St. Louis, has become a member of St. Louis County Medical Society. Dr. Anslinger is a native of Mt. Vernon, Ill., received his preliminary education at St. Louis University and his M.D. degree at Washington University in 1967. He specializes in internal medicine.

Mithlesh G. Asnani, M.D., 825 Euclid, Kansas City, has become a member of Jackson County Medical Society. Dr. Asnani is a native of India, received his preliminary education at Ghaziabad and his M.D. degree at King George's in 1963. He specializes in pediatrics.

Philipp Bornstein, M.D., 4940 Audubon Ave., St. Louis, has become a member of St. Louis County Medical Society. Dr. Bornstein is a native of St. Louis, received his preliminary education at the University of Texas and his M.D. degree at Washington University in 1967. He specializes in psychiatry.

Curtis Bourgeois, M.D., 807 Stadium Rd., Columbia, has become a member of Boone County Medical Society. Dr. Bourgeois is a native of Natchez, Miss., received his preliminary education at Louisiana Polytechnic Institute and his M.D. degree at Louisiana State University in 1961. He specializes in pathology.

C. William Briscoe, M.D., 4940 Audubon, St. Louis, has become a member of St. Louis Medical Society. Dr. Briscoe is a native of St. Louis, received his preliminary education at the University of Missouri and his M.D. degree at the University of Missouri in 1966. He specializes in psychiatry.

Loredana Brizio-Molteni, M.D., 330 W. 47th, Kansas City, has become a member of Jackson County Medical Society. Dr. Brizio-Molteni is a native of Italy, received his preliminary education at Lyceum G. Chiabrera and his M.D. degree at the University of Bologna in 1951. He specializes in plastic surgery.

James Lowry Brown, M.D., 915 N. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Brown is a native of St. Louis, received his preliminary education at St. Louis University and his M.D. degree at St. Louis University in 1944. He specializes in psychiatry.

John S. Carlson, M.D., 4620 J. C. Nichols Parkway, Kansas City, has become a member of Jackson County Medical Society. Dr. Carlson is a native of Kansas City, received his preliminary education at the University of Chicago and his M.D. degree at the University of Chicago in 1967. He specializes in pediatrics.

Richard B. Caspari, M.D., 135 W. Adams, St. Louis, has become a member of St. Louis Medical Society. Dr. Caspari is a native of Montgomery, Ala., received his preliminary education at the University of Florida and his M.D. degree at the University of Florida in 1966. He specializes in orthopedics.

Mohammad Asghar Chaudhary, M.D., 825 Euclid, Kansas City, has become a member of Jackson County Medical Society. Dr. Chaudhary is a native of India, received his preliminary education at Panjab University and his M.D. degree at Nishtar in 1960. He specializes in gastroenterology.

M. Ishaq Chishti, M.D., 1035 Bellevue, St. Louis, has become a member of St. Louis Medical Society. Dr. Chishti is a native of Pakistan, received his preliminary education at Government College and his M.D. degree at King Edward Medical College in 1962. He specializes in ophthalmology.

Ralph Copp, M.D., 4989 Barnes Hospital Plaza, St. Louis, has become a member of St. Louis Medical Society. Dr. Copp is a native of St. Louis, received his preliminary education at Washington University and his M.D. degree at Washington University in 1952. He specializes in internal medicine.

(Continued on page 682)

Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anor nausea, vomiting, and dizziness. Less frequently, diarrhe epigastric distress, pruritus, weariness, drowsiness, giddi and headache have occurred. Rarely, tinnitus, hyperirritab numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient ris cephalin flocculation and SGOT; perianal rash, cholestasis parenchymal liver damage; hyperglycemia; transient leuk malodor of the urine, crystalluria, hematuria; appearance Ascaris in the mouth and nose. Hypersensitivity reactions

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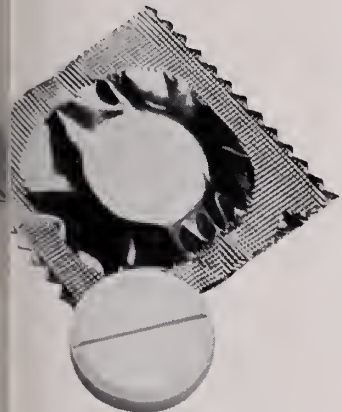
ablets 500 mg

intezol®

IABENDAZOLE | MSD)



easy to take
eryone in the family
n keep to the
gimen you prescribe

le: fever, facial flush, chills, conjunctival injection, edema, anaphylaxis, skin rashes, erythema multiforme ding Stevens-Johnson syndrome), and lymphadenopathy.
ied: Chewable tablets, containing 500 mg thiabendazole, kes of 36, strip packaged, individually foil wrapped; ension, containing 500 mg thiabendazole per 5 ml, in es of 120 ml.

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addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

Carlos J. Deleste, M.D., 2639 Miami, St. Louis, has become a member of St. Louis Medical Society. Dr. Deleste is a native of the Philippines, received his preliminary education at the University of Santo Tomas and his M.D. degree at the University of Santo Tomas in 1967. He specializes in general practice.

Anthony E. Fathman, M.D., 777 S. New Ballas Rd., St. Louis, has become a member of St. Louis County Medical Society. Dr. Fathman is a native of Louisiana, Mo., received his preliminary education at Grinnell College and his M.D. degree at Washington University in 1964. He specializes in urology.

James A. Ferrendelli, M.D., 660 S. Euclid, St. Louis, has become a member of St. Louis Medical Society. Dr. Ferrendelli is a native of Trinidad, Colo., received his preliminary education at the University of Colorado and his M.D. degree at the University of Colorado in 1962. He specializes in neurology.

David L. Gearhart, M.D., 615 S. New Ballas Rd., St. Louis, has become a member of St. Louis Medical Society. Dr. Gearhart is a native of Phoenix, Ariz., received his preliminary education at Wesleyan University and his M.D. degree at St. Louis University in 1971. He specializes in obstetrics and gynecology.

Alfred Gilgore, D.O., 825 Euclid, Kansas City, has become a member of Jackson County Medical Society. Dr. Gilgore is a native of Philadelphia, Pa., received his preliminary education at Temple University and his D.O. degree at Kansas City College in 1967. He specializes in general practice.

Louis A. Gilula, M.D., 17 Sona La., St. Louis, has become a member of St. Louis Medical Society. Dr. Gilula is a native of Lubbock, Tex., received his preliminary education at Southern Illinois University and his M.D. degree at the University of Illinois in 1967. He specializes in radiology.

Robert L. Givler, M.D., Meyer Blvd. at Prospect, Kansas City, has become a member of Jackson County Medical Society. Dr. Givler is a native of Mason City, Ia., received his preliminary education at the University of Iowa and his M.D. degree at State University of Iowa in 1956. He specializes in pathology.

Rengasamy Gowdamarajan, M.D., 825 Euclid, Kansas City, has become a member of Jackson County Medical Society. Dr. Gowdamarajan is a native of Sivakasi, India, received his preliminary education at American College and his M.D. degree at the University of Madras in 1961. He specializes in pediatric cardiology.

Richard E. Hillman, M.D., 500 S. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Hillman is a native of Pawtucket, R. I., received his preliminary education at A. B. Brown University and his M.D. degree at Yale University in 1965. He specializes in pediatrics.

Simon Horenstein; M.D., 1221 Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Horenstein is a native of Providence, R. I., received his preliminary education at the University of Illinois and his M.D. degree at the University of Illinois in 1948. He specializes in neurology.

John D. Hunkeler, M.D., 2929 Baltimore, Kansas City, has become a member of Jackson County Medical Society. Dr. Hunkeler is a native of Kansas City, received his preliminary education at Harvard College and his M.D. degree at the University of Kansas in 1967. He specializes in ophthalmology.

Stephen A. Kamenetzky, M.D., 7450 Delmar, St. Louis, has become a member of St. Louis Medical Society. Dr. Kamenetzky is a native of St. Louis, received his preliminary education at Washington University and his M.D. degree at Washington University in 1970. He specializes in ophthalmology.

Donald L. Kaminski, M.D., 1325 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Kaminski is a native of Elba, Neb., received his preliminary education at Creighton University and his M.D. degree at Creighton University in 1966. He specializes in general surgery.

Kavous Khodadoust, M.D., 1606 Grattan, St. Louis, has become a member of St. Louis Medical Society. Dr. Khodadoust is a native of Iran, received his preliminary education at Alliorz and his M.D. degree at Tehran University in 1965. He specializes in pathology.

Ira J. Kodner, M.D., 216 S. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Kodner is a native of Kentucky, received his preliminary education at Washington University and his M.D. degree at Washington University in 1967. He specializes in general surgery.

MacDonald B. Logie, M.D., 100 N. Euclid, St. Louis, has become a member of St. Louis Medical Society. Dr. Logie is a native of St. Louis, received his preliminary education at Northwestern University and his M.D. degree at Northwestern University in 1967. He specializes in radiology.

Robert G. McConnell, M.D., 1465 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. McConnell is a native of Tacoma, Wash., received his preliminary education at Washington State University and his M.D. degree at Marquette University in 1967. He specializes in orthopedic surgery.

W. Kendall McNabney, M.D., 24th and Cherry, Kansas City, has become a member of Jackson County Medical Society. Dr. McNabney is a native of Coffeyville, Kan., received his preliminary education at the University of Kansas and his M.D. degree at the University of Kansas in 1962. He specializes in surgery.

Jose Manes, M.D., 1325 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Manes is a native of Spain, received his preliminary education at Centro Politecnico and his M.D. degree at Valencia in 1967. He specializes in pathology.

Bill L. Martz, M.D., 2220 Holmes, Kansas City, has become a member of Jackson County Medical Society. Dr. Martz is a native of Anderson, Ind., received his preliminary education at DePauw University and his M.D. degree at Indiana University in 1945. He specializes in internal medicine.

P. Louis Medler, M.D., 11115 New Halls Ferry, Florissant, has become a member of St. Louis County Medical Society. Dr. Medler is a native of St. Louis, received his preliminary education at St. Louis University and his M.D. degree at the University of Missouri in 1967. He specializes in dermatology.

Kenneth L. Milstead, Jr., M.D., 1325 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Milstead is a native of Evanston, Ill., received his preliminary education at George Washington University and his M.D. degree at Georgetown University in 1964. He specializes in anesthesiology.

F. Shah Naheed, M.D., 1035 Bellevue, St. Louis, has become a member of St. Louis Medical Society. Dr. Naheed is a native of Rangoon, Burma, received his preliminary education at Fatima, Jinnah and his M.D. degree at Fatima, Jinnah in 1964. He specializes in ophthalmology.

Michael Orgel, M.D., 100 N. Euclid, St. Louis, has become a member of St. Louis Medical Society. Dr. Orgel is a native of St. Louis, received his preliminary education at Washington University and his M.D. degree at St. Louis University in 1965. He specializes in internal medicine.

Ebello T. Pasia, M.D., Christian Hospital N. W., Florissant, has become a member of St. Louis County Medical Society. Dr. Pasia is a native of the Philippines, received his preliminary education at Far Eastern University and his M.D. degree at Far Eastern University. He specializes in general surgery.

Douglas S. Patton, M.D., 1325 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Patton is a native of Oakland, Calif., received his preliminary education at Stanford University and his M.D. degree at St. Louis University in 1966. He specializes in surgery and plastic surgery.

Antonio R. Penilla, M.D., 1035 Bellevue, St. Louis, has become a member of St. Louis Medical Society. Dr. Penilla is a native of the Philippines, received his preliminary education at the University of Santo Tomas and his M.D. degree at the University of Santo Tomas in 1967. He specializes in internal medicine.

Vernon Jerome Peterson, M.D., 807 Stadium, Columbia, has become a member of Boone County Medical Society. Dr. Peterson is a native of Shelby Co., Ia., received his preliminary education at Denver University and his M.D. degree at Loma Linda University in 1968. He specializes in radiology.

Granville J. Phillips, Jr., M.D., 3411 Sirisu Ave., El Paso, Tex., has become a member of St. Louis Medical Society. Dr. Phillips is a native of Oxnard, Calif., received his preliminary education at Washington University and his M.D. degree at the University of Missouri in 1973. He specializes in obstetrics and gynecology.

Gregory B. Politi, M.D., P.O. Box 975, Columbia, has become a member of Boone County Medical Society. Dr. Politi is a native of Peekskill, N. Y., received his preliminary education at the University of Vermont and his M.D. degree at the University of Vermont in 1967. He specializes in anesthesiology.

A. Razek, M.D., 500 S. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Razek is a native of Cairo, Egypt, received his preliminary education at Nokraski and his M.D. degree at Cairo University in 1963. He specializes in pediatrics.

Dhanalakshmi Rengachary, M.D., 825 Euclid, Kansas City, has become a member of Jackson County Medical Society. Dr. Rengachary is a native of India, received his preliminary education at Holy Cross College and his M.D. degree at Madras in 1962. He specializes in obstetrics and gynecology.

Marco Rizzo, M.D., 1325 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Rizzo is a native of Rome, Italy, received his preliminary education at Auellaneda College and his M.D. degree at Buenos Aires University in 1967. He specializes in plastic surgery.

George Roush, Jr., M.D., 800 N. Lindbergh, St. Louis, has become a member of St. Louis Medical Society. Dr. Roush is a native of Fort Wayne, Ind., received his preliminary education at the University of Wisconsin and his M.D. degree at Washington University in 1951. He specializes in occupational medicine and internal medicine.

Romeo Inarda Santos, M.D., Dunklin County Memorial Hospital, Kennett, has become a member of Dunklin County Medical Society. Dr. Santos is a native of the Philippines, received his preliminary education at the University of the East and his M.D. degree at Manila Central University in 1963. He specializes in psychiatry.

Dipak Kumar Sengupta, M.D., 1755 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Sengupta is a native of India, received his preliminary education at Calcutta University and his M.D. degree at Nilratan Sircar in 1959. He specializes in general surgery.

Chaisiri Sethabutra, M.D., 3820 Itaska, St. Louis, has become a member of St. Louis Medical Society. Dr. Sethabutra is a native of Bangkok, Thailand, received his preliminary education at Chulalongkorn University and his M.D. degree at Siriraj Hospital in 1970. He specializes in general surgery.

David L. Stronsky, M.D., 6420 Clayton Rd., St. Louis, has become a member of St. Louis Medical Society. Dr. Stronsky is a native of Lorain, Ohio, received his preliminary education at the University of Notre Dame and his M.D. degree at St. Louis University in 1968. He specializes in orthopedic surgery.

Martin A. Swerdlow, M.D., 24th and Cherry, Kansas City, has become a member of Jackson County Medical Society. Dr. Swerdlow is a native of Chicago, Ill., received his preliminary education at the University of Illinois and his M.D. degree at the University of Illinois in 1947. He specializes in pathology.

Ronald P. Turgeon, M.D., 6420 Clayton Rd., St. Louis, has become a member of St. Louis Medical Society. Dr. Turgeon is a native of Dover, N. H., received his preliminary education at Assumption College and his M.D. degree at St. Louis University in 1962. He specializes in pathology.

Emil C. Umali, M.D., 808 Pagsonm, St. Louis, has become a member of St. Louis Medical Society. Dr. Umali is a native of the Philippines, received his preliminary education at the University of Santo Tomas and his M.D. degree at the University of Santo Tomas in 1959. He specializes in general surgery.

Orestes S. Valdes, M.D., Olive Blvd. at Woodsmill, Chesterfield, has become a member of St. Louis Medical Society. Dr. Valdes is a native of Cuba, received his preliminary education at Instituto De St. Clara and his M.D. degree at the University of Havana in 1954. He specializes in pediatrics.

Teodoro C. Vargas, M.D., P.O. Box 683, Manchester, has become a member of St. Louis Medical Society. Dr. Vargas is a native of the Philippines, received his preliminary education at Far Eastern University and his M.D. degree at Far Eastern University in 1964. He specializes in surgery.

Angela A. Villanueva, M.D., 1755 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Villanueva is a native of the Philippines, received her preliminary education at the University of the Philippines and her M.D., degree at the University of the Philippines in 1964. She specializes in pathology.

Alberto B. Viloria, M.D., 2425 N. Broadway, St. Louis, has become a member of St. Louis

Medical Society. Dr. Viloria is a native of the Philippines, received his preliminary education at Northern Christian College and his M.D. degree at Far Eastern University in 1965. He specializes in surgery.

Shuh-min Wu, M.D., 425 E. 63rd, Kansas City, has become a member of Jackson County Medical Society. Dr. Wu is a native of Taiwan, received his preliminary education at Kaoshing and his M.D. degree at Kaoshing in 1966. He specializes in internal medicine.

Fred R. Zivnuska, M.D., 510 S. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Zivnuska is a native of Milwaukee, Wis., received his preliminary education at Marquette University and his M.D. degree at the University of Wisconsin in 1970. He specializes in radiation therapy.

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LARGE KANSAS CITY INDUSTRIAL ORGANIZATION—Has opening for physician with interest, training or experience in Occupational Medicine. Will be responsible for administration of plant medical program. Excellent working conditions and liberal benefits, including insurance, furnished car, etc. Send resume and salary requirements to P.O. Box 7982, Kansas City, Missouri 64129. An equal opportunity employer.

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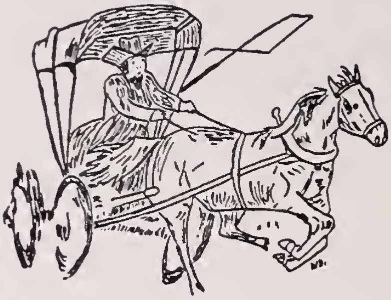
Missouri Medicine in Review



FORTY YEARS AGO

"For centuries and ages, the main or only defenses against diseases were prayers, magic, incantations, sacrifices and taboos. Gods, devils and witches were associated with illness and death. Depressing as these beliefs may be, some of the notions concerning illness which were prevalent in the 16th and 17th centuries, great centuries of renaissance and of intellectual curiosity as they were, are appalling.

"Medicine was interpreted during those centuries according to Galen and the humoral theory of disease and to the Arabians and astrology. And, neither the humoral theory nor the astrology bore relation to the facts.

"When William Harvey described the circulation of the blood, one of the medical leaders of his day said that if Harvey's dissections did not agree with Galen's teachings, then the nature and structure of man had changed since Galen's day, as it could not be admitted that Galen had erred.

"Jenner's teaching in regard to inoculation for small pox was so at variance with all the teaching and knowledge of the day that it encountered violent opposition from all sides and was branded as paradoxical, useless, false, impossible, absurd and harmful. Vaccination has freed childhood today from what was its greatest menace prior to Jenner's discovery."

Flashing into the public consciousness with the dramatic suddenness of a major catastrophe early in August, an epidemic of encephalitis appeared in St. Louis County, particularly in that part adjacent to the city of St. Louis. Within less than a month, 302 cases had been reported, with the death rate varying from about 10% in the city to 15% in the county. This is all the more remarkable since no unusual prevalence of encephalitis had been reported elsewhere in the United States, and its existence was unsuspected in this vicinity until a large number of cases developed.

TWENTY-FIVE YEARS AGO

It is interesting in any discussion of shock to remember that "shock" is not a new word. Henri Francois LeDran used this word in 1743. He described the capillaries "to be choked up" in shock; he knew about "sludge." And, best of all, he left documentary proof of his observation. Capillary constriction which preceded "sludge" was observed in 1733 by Stephan Hales, an English minister.

Herbert L. Mantz, M.D., Kansas City, was installed as president of the National Tuberculosis Association on June 18 at the closing session of the Association's annual session in New York. —C. Edgar Virden, M.D., Kansas City, was chosen as chairman of the board of chancellors of the American College of Radiology.

Robert Elman, M.D., St. Louis, was one of nine physicians who left on July 1 for Poland and Finland to establish the first medical training mission under the sponsorship of the Unitarian Service Committee, the United Nations World Health Organization and the Department of State. The group will remain there until August 10.

On July 8, the city of Nevada voted approval of a bond issue of $225,000 for an addition to the Nevada Hospital by a vote of 1,479 for and 274 against.

E. D. Urban, M.D., Sikeston, was elected chairman of the staff executive committee of the Missouri Delta Community Hospital in Sikeston at a meeting on June 10. Other officers elected were Drs. Samuel P. Martin of East Prairie, vice-chairman; S. M. Sarno of Morehouse, secretary; and E. J. Nienstedt of Sikeston, Treasurer.

TEN YEARS AGO

In 1962, motorists raced down the nation's highways to a new death record which for the first time exceeded 40,000 fatalities, according to a report by Travelers Insurance Company. Young drivers had the worst performance record of any age group. Drivers less than 25 years of age comprise only about 15% of all licensed drivers in the United States, yet they were involved in approximately 29% of all fatal accidents. In 1961, this age group was involved in 27.3% of all highway deaths. Not since 1941, when 39,969 persons lost their lives, has the traffic fatality record been so high.

Among members of the 13-member advisory board named by Proctor W. Carter to assist in administering the new Kerr-Mills Law are Dr. Stanley S. Peterson, Springfield, and Dr. Avery P. Rowlette, Moberly. Mr. T. R. O'Brien was named an ex officio member.

Mario Garza Gonzalez, M.D. was recently elected president of the staff of Johnson County Hospital in Warrensburg. R. E. Cooper, M.D., was elected vice-president.

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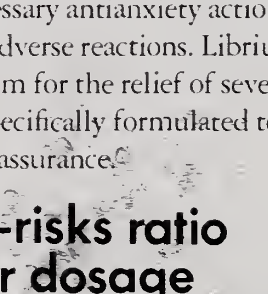

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Precautions: In the elderly and debilita and in children over six, limit to smallest effe tive dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gr ally as needed and tolerated. Not recommend in children under six. Though generally not r ommended, if combination therapy with othe psychotropics seems indicated, carefully consi individual pharmacologic effects, particularly use of potentiating drugs such as MAO inhib and phenothiazines. Observe usual precautio presence of impaired renal or hepatic functio Paradoxical reactions (*e.g.*, excitement, stimul and acute rage) have been reported in psychia patients and hyperactive aggressive children. Employ usual precautions in treatment of an states with evidence of impending depression suicidal tendencies may be present and protec measures necessary. Variable effects on blood coagulation have been reported very rarely i patients receiving the drug and oral anticoagu lants; causal relationship has not been establi clinically.

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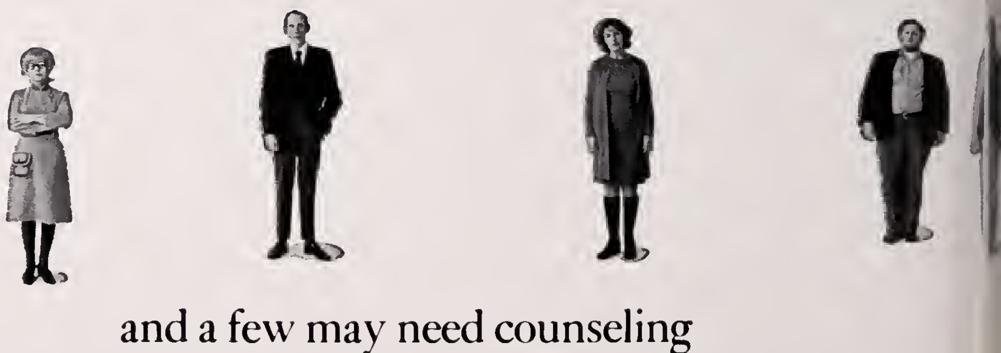

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nt is presently taking drugs
if so, what his response has
. Along with the medical and
l history, this information can
you determine initial dosage,
ossibility of side effects and
ltimate prospects of success
lure.
While Valium can be a most
ul adjunct to your counseling,
uld be prescribed only as long
cessive psychic tension per-
and should be discontinued
you decide it has accom-
ed its therapeutic task. In
al, when dosage guidelines
llowed, Valium is well
ted (see Dosage). For con-
nce it is available in 2-mg, 5-mg
o-mg tablets.
rowsiness, fatigue and ataxia
been the most commonly re-
d side effects.
ntil response is determined,
nts receiving Valium should
utioned against engaging in
dous occupations requiring
lete mental alertness, such
ving or operating machinery.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

Valium®
(diazepam)
To help you manage excessive psychic tension

Missouri Medicine

THE JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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acute arthritic inflammation...heat that freezes

In acute rheumatoid arthritis consider Tandearil. The anti-inflammatory action of Tandearil quickly helps reduce heat, pain, swelling, and stiffness. Results are usually seen in 3 or 4 days. Try it for a week when the symptoms defy aspirin control.

Remember that Tandearil is not a simple analgesic. It should not be used on patients responding to routine therapy. Before using, please read the prescribing information. It's summarized below.

Tandearil® helps take the heat off
oxyphenbutazone NF

Geigy

Tablets of 100 mg.
mportant Note: This drug is not a simple
analgesic. Do not administer casually. Care-
ully evaluate patients before starting treat-
ment and keep them under close supervision.
Obtain a detailed history, and complete phys-
cal and laboratory examination (complete
hemogram, urinalysis, etc.) before prescribing
and at frequent intervals thereafter. Carefully
elect patients, avoiding those responsive to
outine measures, contraindicated patients
or those who cannot be observed frequently.
Warn patients not to exceed recommended
dosage. Short-term relief of severe symptoms
with the smallest possible dosage is the goal
of therapy. Dosage should be taken with meals
or a full glass of milk. Patients should discon-
inue the drug and report immediately any sign
of: fever, sore throat, oral lesions (symptoms
of blood dyscrasia); dyspepsia, epigastric
ain, symptoms of anemia, black or tarry
tools or other evidence of intestinal ulcera-
ion or hemorrhage, skin reactions, significant
weight gain or edema. A one-week trial period
s adequate. Discontinue in the absence of a
avorable response. Restrict treatment periods
o one week in patients over sixty.
ndications: Acute gouty arthritis, rheumatoid
rthritis, rheumatoid spondylitis.
ontraindications: Children 14 years or less;
enile patients; history or symptoms of G.I.
nflammation or ulceration including severe,
ecurrent or persistent dyspepsia; history or
resence of drug allergy; blood dyscrasias;
enal, hepatic or cardiac dysfunction; hyper-
ension; thyroid disease; systemic edema;
tomatitis and salivary gland enlargement due
o the drug; polymyalgia rheumatica and tem-
oral arteritis; patients receiving other potent
hemotherapeutic agents, or long-term anti-
oagulant therapy.
arnings: Age, weight, dosage, duration of
herapy, existence of concomitant diseases,
nd concurrent potent chemotherapy affect in-
idence of toxic reactions. Carefully instruct
nd observe the individual patient, especially
he aging (forty years and over) who have
ncreased susceptibility to the toxicity of the
rug. Use lowest effective dosage. Weigh
nitially unpredictable benefits against po-
tential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
(B)98-146-800-F (10/71)
For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

TA 9041

More than sleep

your choice of sleep medication is wisely based on more than sleep-inducing potential

sleep with relative safety

Chronic tolerance studies have confirmed the relative safety of D (flurazepam HCl); no depression of cardiac or respiratory f was noted in patients administered recommended or highe for as long as 90 consecutive nights.

In most instances when adverse reactions were reported, they were mild, infrequent and sel quired discontinuance of therapy. Morning "hang-over" with Dalmane has been relatively infrequen ness, drowsiness, lightheadedness and the like have been the side effects noted most frequently, particularly in the elderly and debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

sleep for 7 to 8 hou without need to repeat dosage

No slee cation has been as rigorously evaluated in the sleep research laboratory as Dalmane. Insomnia given one 30-mg capsule of Dalmane at bedtime, on average: fell asleep within 17 minutes, had fewe time awakenings, spent less time awake after sleep onset, and slept for 7 to 8 hours with no need t dosage during the night.

ep with
nsistency

Dalmane has been shown to be consistently effective even during consecutive nights of administration, with no need to increase dosage.

mane (flurazepam HCl) is a distinctive sleep medication—a
iazepine specifically indicated for insomnia. It is not a bar-
or methaqualone, nor is it related chemically to any other
e hypnotic.

en your evaluation of insomnia indicates the need for a sleep
tion, consider Dalmane—a single entity nonnarcotic, non-
ate agent proved effective and relatively safe for relief of
ia.

DALMANE®
(flurazepam HCl)

When restful sleep is indicated

One 30-mg capsule *h.s.*—usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*—initial dosage for elderly or debilitated patients.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening, in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage, 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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Div., Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Opinion & Dialogue

"Prescription drugs – who should determine the maker?"

Dispenser of Medicine

Clifton J. Latiolais
President
American
Pharmaceutical
Association

"Too many doctors are inc
ent to the economic consequen
their decisions." So stated a rec
issue of *Medical News Report* (
cember 4, 1972), an independe
weekly newsletter published by
AMA Chief Executive F. J. L. Bla
game, M.D.

Doctor, are you indifferent...?

In discussing an anticipat
crease in Blue Shield rates, Dr.
ingame's newsletter had this to
"In general, it can be said
have given the impression they
not particularly concerned with
increase in cost of health care t
patients...
"True, an MD's training is
marily scientific, but in the rea
of practice, all of his scientific c
sions have a price tag, or an ec
impact. The economics of heal
beckon the practitioner's atten
Concern for economics of medi

Maker of Medicine

C. Joseph Stetler
President
Pharmaceutical
Manufacturers
Association

When the pharmacist rec
mends that a drug product othe
the one ordered be dispensed,
prescriber invariably permits th
change when he feels the best i
ests of the patient will be serve

Shortcomings of Pro-Substituti Argument

The fact remains that it is
sary for the prescriber to know
the change is being contemplat
and to be in a position to conse
demur. Without that opportunit
unilateral decision of the pharm
made in the absence of clinical
edge of the patient, could expo
to needless risks, and in additi
jeopardize the relationship bet
the professions of Pharmacy a
Medicine. In my view, there is
in the pro-substitution argume
offsets these risks.

The Issue of Drug Knowledge

Substitution advocates cl
that the primary justification f
changing the rules is the desire
better utilize pharmacists' kno
about drugs. Yet the pharmaci
task to keep current on the enti
field of drug therapy, to some c
puts him at a disadvantage. Mo
often, a practicing physician wi
expert knowledge of no more th

Advertisement

be an obligation of medical
e...
Medical societies ought to con-
ntinuing campaigns to point
substantial savings that could
ized thru deductible insurance
otection for catastrophic ill-
t the very least, they should, in
ients' interest, question the
of any insurance organization
ses health care costs by forc-
cyholders to buy insurance
ay not need or want and prob-
n't ever use.
Too many doctors are indiffer-
he economic consequences of
cisions. Too many, for ex-
habitually hospitalize patients
convenience of the MD. It's
se to deny such habits exist...
Doctors, thru their medical so-
have unhesitatingly appealed
patients for support in the
ainst government interference
private practice of medicine.
public in the past has re-
d. It's time the American Med-
ociation and state and local
l societies paid off the debt by
action to hold down the cost
cal care."

Drugs

surance rates and hospital
s are only two factors in health care costs. The cost of drugs—both prescription and nonprescription—is another.

And when it comes to drug costs, the nation's pharmacists *are concerned*. Through their national professional society, the American Pharmaceutical Association, pharmacists are advising the public to use nonprescription medication cautiously and conservatively, and to seek the advice of their pharmacist before selecting or purchasing such drugs.

Outdated Laws

The pharmacist also is aware that when it comes to prescription drugs, often he has an even greater opportunity to reduce the cost to the patient—with no sacrifice in the quality of the medication dispensed. But in many states, outdated and antiquated laws prevent the pharmacist from engaging in drug product selection. "Drug product selection" simply means that the pharmacist functions in the patient's interest by consciously choosing, from the multiple brands available, a low-cost quality brand of the specific drug to be dispensed in response to the physician's prescription order.

Much *misinformation* has been purposely spread by those who stand to gain financially by maintaining high drug costs to the public. An endless stream of propaganda has emanated from the drug industry in an effort to persuade the medical profession that these so-called anti-substitution laws should be retained. And as long as these laws are retained, the drug industry will continue its current marketing practices which contribute unnecessarily to high drug costs to patients. These practices also are inviting government agencies to expand their restrictive controls on physicians and pharmacists.

APhA Efforts

As pharmacists, we are concerned about health care costs. We hope that every physician shares our concern on this vital issue, and will give his personal support to the constructive efforts APhA has undertaken in the interest of all patients.

(For a complete discussion of drug product selection, you are invited to request a free copy of the "White Paper on the Pharmacist's Role in Product Selection" from: American Pharmaceutical Association, 2215 Constitution Avenue, N.W., Washington, D.C. 20037.)

---

rugs that he selects to treat the
y of conditions encountered in
ctice. Moreover, the physi-
hoice of a specific brand is
n his knowledge of the pa-
medical history and current
on, and his experiences with
icular manufacturer's
t.
me substitution proponents
gued that the dispensing of a
ption is a simple two-party
tion between the pharmacist
patient, and that a substitut-
rmacist may avoid even a
al breach of contract by simply
g the patient that he is making
stitution. I would judge that
rts would be sympathetic
a pharmacist who substituted
physician approval and who
ok a legal defense that seeks
the patient responsible for
rmacist's actions.

Prescription Prices?

bstitution advocates are
ing to the consumer, and par-
the consumer activist, that
prescription prices could
galization of substitution.
seen absolutely no evidence
y this claim. To the contrary,
nce in Alberta, Canada, where
tion is authorized, suggests the opposite.

Many pharmacists understandably are concerned about the cost of maintaining multiple stocks of similar products. While there is no doubt that inventory costs rise when additional brands are stocked, it would be interesting to know how much they rise, and how many pharmacists actually stock *all* brands—of, say, ampicillin or tetracycline—or how long they keep "slow moving" products on their shelves before they are returned for credit. To ask that the industry eliminate multiple sources is to ask competitors to stop competing.

Drug Substitution—A License for the Unethical

Anti-substitution repeal would favor "corner cutting" pharmacists and manufacturers. For them, free substitution would be not a right, but a license. As an aftermath, it is quite likely that the confidence of both physicians and patients in the profession of Pharmacy would be eroded, as revelations about the unconscionable behavior of an undisciplined few were magnified in the press or in professional circles.

Summary

In short, what the American Pharmaceutical Association advocates as a broad-spectrum panacea looks to us to be not only a minority view (advocacy of substitution is by no means a uniform policy in Pharmacy), but also an extraordinarily costly and ineffective remedy, whose side effects are odious. We believe (1) that an impressive majority of pharmacists prefer to work with Medicine and with industry, for the consumer, and for the general good, (2) that they seek the privilege to substitute when the patient might gain and when the patient's doctor agrees, and (3) that they seek to work for the resolution of genuine grievances openly and professionally.

(For amplification of PMA views, please write for our booklet, "The Medications Physicians Prescribe: Who Shall Determine the Source?" It is available from: Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.)

Pharmaceutical
Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

ROCHE announces new BACTRIM™

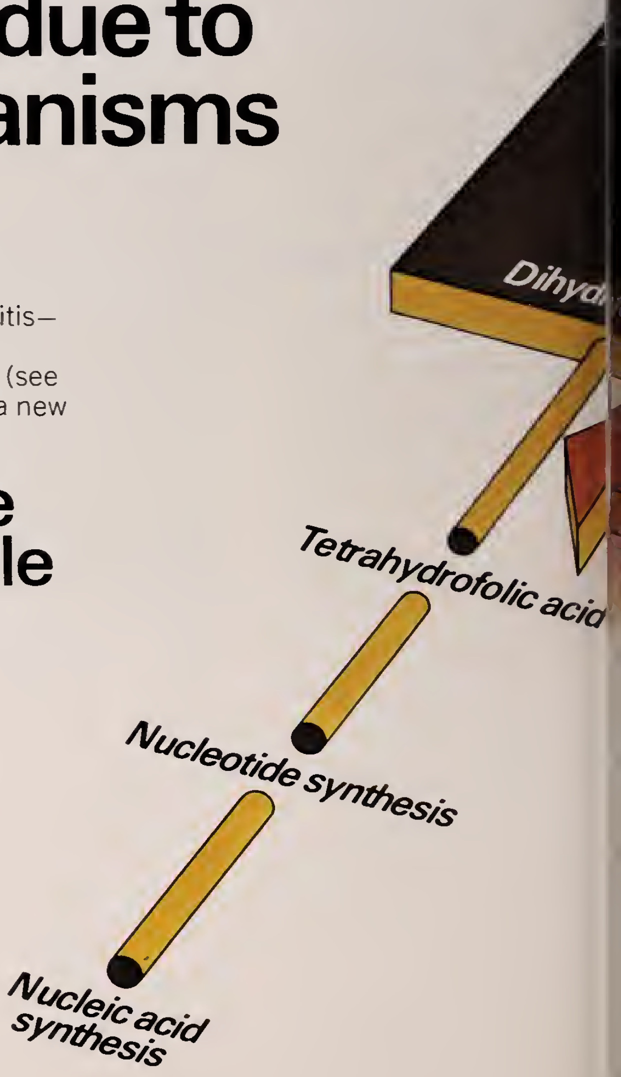
Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

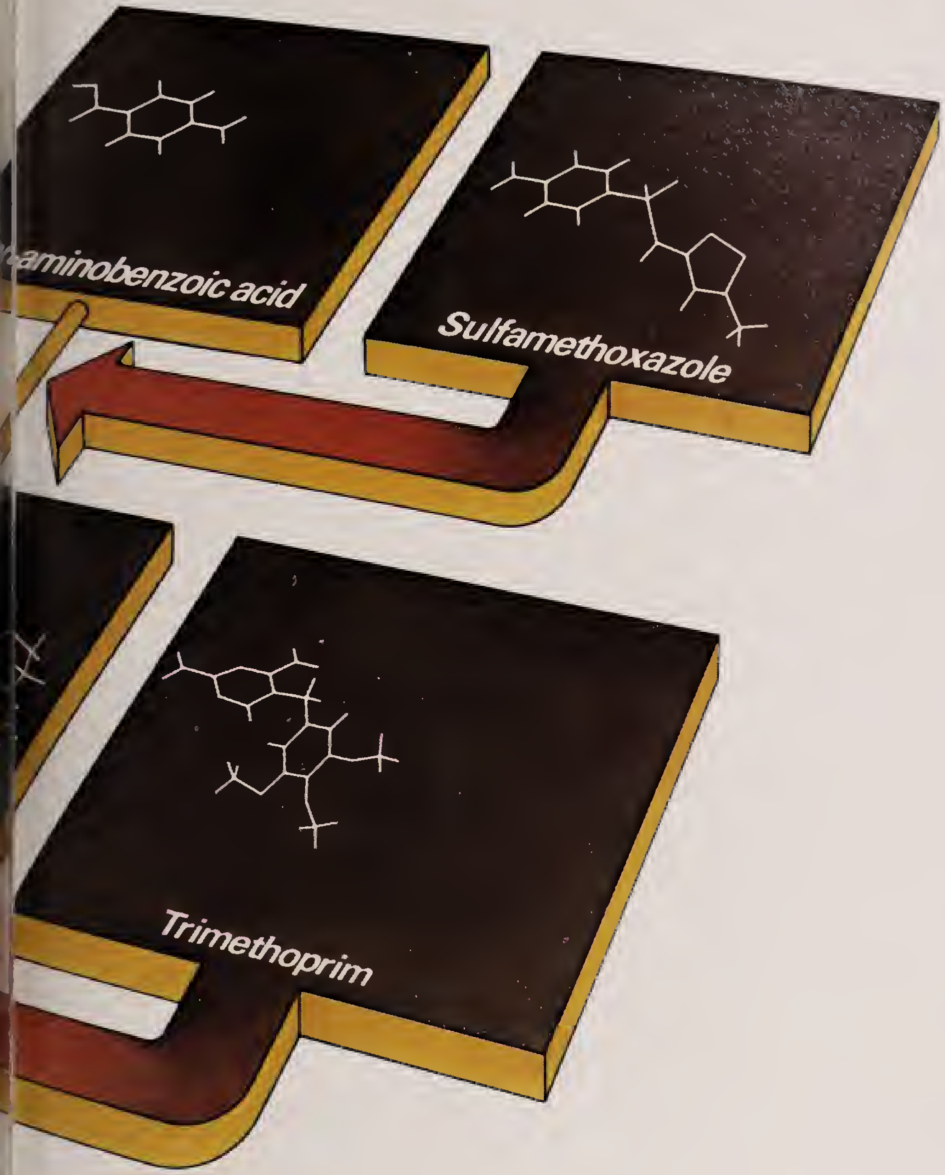
a new type of antibacterial for a two-pronged attack against chronic urinary tract infections due to susceptible organisms

Bactrim is highly effective in the treatment of these infections—primarily pyelonephritis, pyelitis and cystitis—when due to susceptible organisms. This efficacy is related to the unique mode of action against bacteria (see illustration), an action that, in effect, makes Bactrim a new type of antibacterial.

Bactrim interrupts the life cycle of susceptible bacteria

Unique mode of action interrupts the life cycle at two important points, thereby impeding the production of nucleic acids and proteins essential to these bacteria. These consecutive interruptions occur because sulfamethoxazole and trimethoprim resemble naturally existing substrates. By competitive replacement of these substrates, they inhibit further synthesis.




aminobenzoic acid
Sulfamethoxazole
Trimethoprim

ROCHE

new BACTRIM™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

for chronic urinary tract infections

Before prescribing, please see complete product information on last page of advertisement.

Excellent clinical response in chronic urinary tract infections even with obstructive complications

A multiclinic, double-blind study* of response to a ten-day course of therapy in 471[†] patients with chronic urinary tract infections demonstrated the superiority of Bactrim. On the 10th day after initiation of therapy, 91.7% (of 168 patients) showed significant bacteriological response to Bactrim, compared with 81.2% (of 144 patients) to trimethoprim and 64.5% (of 155 patients) to sulfamethoxazole. More than half of these patients had obstructive complications.

Excellent response maintained

Bactrim proved equally impressive in maintaining this bacteriological response. In the above study, after a ten-day course of therapy with Bactrim, 68.4% of patients with chronic urinary tract infections *maintained* response for up to 42 consecutive days, compared with 59.7% with trimethoprim and 44.4% with sulfamethoxazole. These results are particularly noteworthy considering the number of patients with obstructive complications—cases regarded as being notoriously difficult to treat.

Prescribing considerations

Clinical Limitations: Currently, the increasing fr quency of resistant organisms is a limitation of usefulness of all antibacterial agents, especially in the treatment of chronic and recurrent urinar tract infections. Not recommended for children under twelve.

Contraindications: Hypersensitivity to trimethop or sulfonamides. Pregnancy and during the nur ing period.

Warnings and Precautions: Both sulfamethoxaz and trimethoprim have been reported to interfe with hematopoiesis. Complete blood counts sho be done frequently. If a significant reduction in count of any formed blood element is noted, Bac should be discontinued. Bactrim should be give with caution to patients with impaired renal or hepatic function, possible folate deficiency, sev allergy or bronchial asthma. Maintain adequate fluid intake. Urinalyses with careful microscopic examination and renal function tests should be performed during therapy, particularly for those patients with impaired renal function.

Adverse Effects: Among the most common side effects are nausea, vomiting, rash, leukopenia a elevations in SGOT and creatinine.

Usual adult dosage: two tablets every twelve h for 10 to 14 days; no loading dose required.

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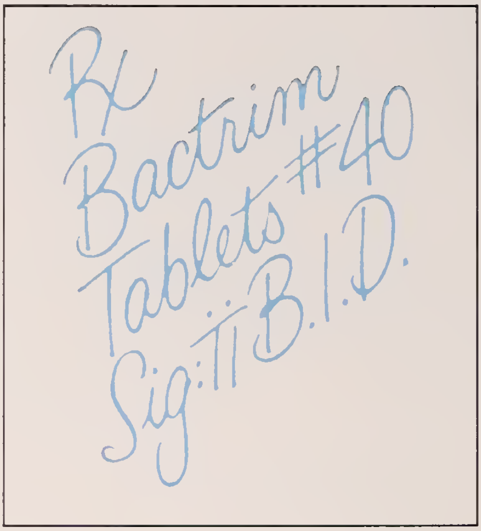
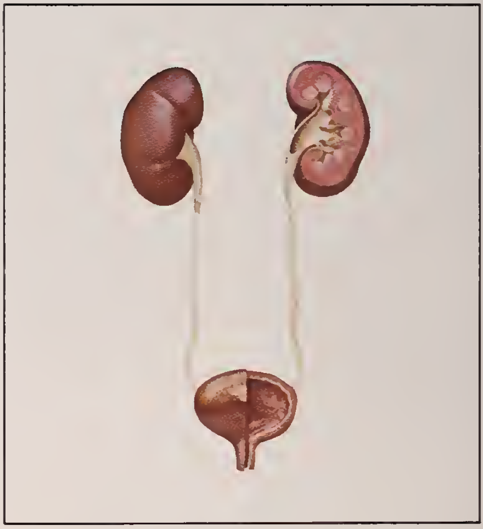
*Data on file, Hoffmann-La Roche Inc., Nutley, N.J. 071

[†] 4 patients not available for evaluation at day 10.



Rx
Bactrim
Tablets #40
Sig: ii B.I.D.



new **BACTRIM**™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

for chronic urinary tract infections

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc
Nutley N J 07110

Product Information:

on: Bactrim is a synthetic antibacterial combination prod-
able in scored light-green tablets, each containing 80 mg
prim and 400 mg sulfamethoxazole.

prim is 2,4-diamino-5-(3,4,5-trimethoxybenzyl) pyrimidine.
ite to light-yellow, odorless, bitter compound with a molec-
ht of 290.3.

hoxazole is N^1-(5-methyl-3-isoxazolyl) sulfanilamide. It is
t white in color, odorless, tasteless compound with a mo-
eight of 253.28.

icrobiology: Sulfamethoxazole inhibits bacterial synthesis
ofolic acid by competing with *para*-aminobenzoic acid.
prim blocks the production of tetrahydrofolic acid from di-
acid by binding to and reversibly inhibiting the required
dihydrofolate reductase. Thus, Bactrim blocks two con-
steps in the biosynthesis of nucleic acids and proteins
to many bacteria.

udies have shown that bacterial resistance develops more
th Bactrim than with trimethoprim or sulfamethoxazole

erial dilution tests have shown that the spectrum of anti-
activity of Bactrim includes the common urinary tract
s with the exception of *Pseudomonas aeruginosa*. The fol-
ganisms are usually susceptible: *Escherichia coli, Kleb-
erobacter, Proteus mirabilis* and indole-positive proteus

epresentative Minimum Inhibitory Concentration Values for Bactrim-Susceptible Organisms
(MIC—mcg/ml)

	Trimeth-oprim alone	Sulfameth-oxazole alone	TMP/SMX (1:20) TMP	SMX
hia	0.05—1.5	1.0 —245	0.05—0.5	0.95— 9.5
pp. sitive	0.5 —5.0	7.35 —300	0.05—1.5	0.95—28.5
	0.5 —1.5	7.35 — 30	0.05—0.15	0.95— 2.85
cter	0.15—5.0	0.735—245	0.05—1.5	0.95—28.5

harmacology: Bactrim is rapidly absorbed following oral
ation. The blood levels of trimethoprim and sulfamethoxa-
imilar to those achieved when each component is given
k blood levels for the individual components occur one
urs after oral administration. The half-lives of sulfameth-
d trimethoprim, 10 and 16 hours respectively, are rela-
same regardless of whether these compounds are admin-
s individual components or as Bactrim. Detectable
f trimethoprim and sulfamethoxazole are present in the
hours after drug administration. Free sulfamethoxazole
thoprim blood levels are proportionately dose-dependent.
ed administration, the steady-state ratio of trimethoprim
thoxazole levels in the blood is about 1:20.

oxazole exists in the blood as free, conjugated and pro-
forms; trimethoprim is present as free, protein-bound
olized forms. The free forms are considered to be the
cally active forms. Approximately 44 percent of trimeth-
70 percent of sulfamethoxazole are protein-bound in the
presence of 10 mg percent sulfamethoxazole in plasma
the protein binding of trimethoprim to an insignificant
imethoprim does not influence the protein binding of
oxazole.

of Bactrim is chiefly by the kidneys through both glomer-
ion and tubular secretion. Urine concentrations of both
oxazole and trimethoprim are considerably higher than
ncentrations in the blood. When administered together
rim, neither sulfamethoxazole nor trimethoprim affects
excretion pattern of the other.

: Chronic urinary tract infections (primarily pyelonephri-
s and cystitis) due to susceptible organisms (usually
ebsiella-Enterobacter, Proteus mirabilis, and, less fre-
dole-positive proteus species).

**ote: Currently, the increasing frequency of resistant organ-
mitation of the usefulness of all antibacterial agents, espe-
treatment of chronic and recurrent urinary tract infections.**

ations: Hypersensitivity to trimethoprim or sulfonamides.
y and during the nursing period (see Reproduction
)

eaths associated with the administration of sulfonamides
reported from hypersensitivity reactions, agranulocyto-
c anemia and other blood dyscrasias. Experience with
im alone is much more limited, but it has been reported
with hematopoiesis in occasional patients. In elderly
oncurrently receiving certain diuretics, primarily thia-
ncreased incidence of thrombopenia with purpura has
ted.

The presence of clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts should be done frequently in patients receiving Bactrim. If a significant reduction in the count of any formed blood element is noted, Bactrim should be discontinued.

At the present time, there is insufficient clinical information on the use of Bactrim in infants and children under 12 years of age to recommend its use.

Precautions: Bactrim should be given with caution to patients with impaired renal or hepatic function, to those with possible folate deficiency and to those with severe allergy or bronchial asthma. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis may occur. This reaction is frequently dose-related. Adequate fluid intake must be maintained in order to prevent crystalluria and stone formation. Urinalyses with careful microscopic examination and renal function tests should be performed during therapy, particularly for those patients with impaired renal function.

Adverse Reactions: For completeness, all major reactions to sulfonamides and to trimethoprim are included below, even though they may not have been reported with Bactrim.

Blood dyscrasias: Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia.

Allergic reactions: Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis.

Gastrointestinal reactions: Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis.

C.N.S. reactions: Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness.

Miscellaneous reactions: Drug fever, chills, and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L. E. phenomenon have occurred.

The sulfonamides bear certain chemical similarities to some goitrogens, diuretics (acetazolamide and the thiazides) and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents. Rats appear to be especially susceptible to the goitrogenic effects of sulfonamides, and long-term administration has produced thyroid malignancies in the species.

Dosage and Administration: Not recommended for use in children under 12 years of age.

The usual adult dosage is two tablets every 12 hours for 10 to 14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	2 tablets every 24 hours
Below 15	Use not recommended

How Supplied: Tablets, containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 1000; Prescription Paks of 40, available singly and in trays of 10. Imprint on tablets: ROCHE 50.

Reproduction Studies: In rats, doses of 533 mg/kg sulfamethoxazole or 200 mg/kg trimethoprim produced teratological effects manifested mainly as cleft palates. The highest dose which did not cause cleft palates in rats was 512 mg/kg sulfamethoxazole or 192 mg/kg trimethoprim when administered separately. In two studies in rats, no teratology was observed when 512 mg/kg of sulfamethoxazole was used in combination with 128 mg/kg of trimethoprim. However, in one study, cleft palates were observed in one litter out of 9 when 355 mg/kg of sulfamethoxazole was used in combination with 88 mg/kg of trimethoprim.

In rabbits, trimethoprim administered by intubation from days 8 to 16 of pregnancy at dosages up to 500 mg/kg resulted in higher incidences of dead and resorbed fetuses, particularly at 500 mg/kg. However, there were no significant drug-related teratological effects.

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Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

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Special Feature

Health Planning in Missouri

By

ROBERT W. KELLEY, M.D., *St. Louis*

Chairman, Governor's Advisory Council for Comprehensive Health Planning

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The following is a transcript of the address which Dr. Kelley delivered at the annual meeting of the Missouri Chapter, American College of Surgeons on June 1, 1973. The Editors believe that this message delivered to surgeons is applicable and of interest to all Missouri physicians. Dr. Kelley, who is Assistant Professor of Clinical Medicine at the Washington University School of Medicine, is a Vice-President of the Missouri State Medical Association and a Delegate to the American Medical Association. He also is a member of the Governing Board of ARCH.

First, an explanation is due as to how an internist gains a place on the program of this distinguished Chapter meeting of the American College of Surgeons. I admit that the mechanism is a little on the sneaky side, but it evolved from my associations with health planning. My entry into health planning was casual and largely involuntary. My continued presence is due partly to a sense of responsibility to my professional peers, but more so to the satisfaction I gain from participating in an experiment which I believe will bear fruit and eventually result in better health care for all the citizens of our state. As physicians, we are trained from entry into the medical system to advance the art and the science of the profession. As a profession, we are too often pictured as primarily interested in securing a good living. As an individual, I see no wrong in working hard and enjoying the fruits of my labors. I do feel, as do the vast majority of my fellow physicians, that I have a responsibility based upon any talents I possess to make my community and my environment a better place in which to live.

I shall not burden you with a detailed history of health planning nor shall I quote from extensive sources of the growing literature on health care and the delivery of health services. I prefer to give a brief résumé of health planning in this country and particularly in Missouri, with special reference to Comprehensive Health Planning. It would then be my aim to suggest how each of you as an individual and your collective organization can participate in the process of planning.

Physicians have always planned how they may best utilize their time and resources in caring for their patients. Collectively, they have planned as professional and scientific societies. It is a most unusual organization that does no have a long-range planning committee. Health planning has preoccupied private and public agencies, foundations, philanthropic societies, public and private hospitals, medical school and lawmakers at the federal, state and loca levels since the founding of the country. Public health departments have contributed their share of planning. Critics from the right, the cente and the left have dissected the health system and submitted their plans for modifying or replacing our pluralistic system for the delivery of health services. These multiple approache to health planning have been largely independent and uncoordinated. The usual approach has been paternalistic, i.e., "We have analyzed your problem, evaluated alternatives and now present you with a 'plan.'" In general, planning has been for people and not with people.

The 1946 Hospital Survey and Construction Act (Hill-Burton), which provided federa funding for hospital construction, required participating states to qualify by preparing plans

This represented a beginning for coordinated egional planning. Federal funding for services o the mentally retarded became available in 963. Out of the report of the DeBakey Com- nission calling for an attack on cancer, heart disease and stroke came the Regional Medical Programs (Public Law 89-239). Shortly there- fter, Public Law 89-749, which was the first of the Partnership in Health Laws, set up the Com- rehensive Health Planning Program. The Com- rehensive Health Planning ultimate goal, as de- ned by the Congress, is "to promote and as- ure the highest level of health attainable for very person in an environment which contrib- tes positively to healthful individual and fam- y living." The struggle to reach this goal is o be directed by a partnership between and mong providers and consumers drawn from oth private and governmental sections of our ociety. At all levels of planning, the majority artner will be the consumer (not less than 1%). The minimum function of Comprehen- ve Health Planning is to review and comment n federally specified categories of health pro- rams. The maximum effort is to achieve the ltimate goal set up by the Congress.

It is an oversimplification to describe Region- Medical Programs as professionally oriented nd Comprehensive Health Planning as con- umer oriented. The generalization, however, oes point up one difference in the two pro- rams. As these two programs developed in Mis- uri, a working partnership emerged, and it is y personal evaluation that the phasing-out of e Regional Medical Programs is unfortunate d places an additional burden on CHP, which ust partially fill the void. CHP, by definition d by direction, has a planning function. It ay develop the need for specific programs and ek others to implement those programs, but it es not have the responsibility, the capabilities the staff to operate or direct programs.

In Missouri, by direction of the Governor, PH was placed in the Department of Commu- ty Affairs. The State Advisory Council, ap- ointed by the Governor, serves without com- nsation or stated term. Current legislative and ecutive proposals (if implemented) could ace CPH in another executive department and ve the Council statutory authority. The State lvisory Council, as presently constituted, has members, 51% being consumers of health rvices. The issues the Council deals with in- ude accessibility to health services, health care sts, programs, man power, facilities, human ecology and environmental quality. Current problems under examination include public health, mental health, home health care, ambulatory care, emergency medical services, acute care, convalescent care and occupational safety and health.

Comprehensive Health Planning is charged by law with the responsibility of implementing the regionalization of health services and prevention of disease and injury through environmental protection. It is the keystone in the partnership between federal authorities, state government and local citizens. It is required by law to review and evaluate the plans for hospitals, neighborhood health centers and other medical facilities. It must review portions of the health care plans of the Division of Health, Division of Mental Health and the three Regional Medical Programs operating in Missouri. Also, it must review all Department of Health, Education and Welfare health care funds going to individual and local communities in Missouri. This all adds up to a considerable responsibility and would not be workable without the area planning agencies which now serve 85% of the population of Missouri. The Council has set complete coverage of the state by area agencies as a major priority. Completion of this task is dependent on the availability of federal, state and local funding. Of equal importance is the development of local interest, enthusiasm and demand for comprehensive health planning.

The provider-consumer partnership concept has been described. Basic to effective planning is the acceptance of the philosophy that local communities or contiguous geographical areas are best able to identify their health care needs and to plan for meeting those needs. A truly viable area CHP agency should be able to develop plans that recognize the needs of all segments of the community, coordinate the thinking and expertise of dedicated providers and consumers and offer the ideal setting for discussion, debate and compromise.

In a cursory fashion, I have attempted to develop the ideal operation of Comprehensive Health Planning. You have all had the opportunity as participators, spectators or daily newspaper readers to surmise that all does not go smoothly for health planning. It is difficult to bring together a group of doctors, present a problem of health for discussion and expect to get a ready consensus. Multiply such difficulty many times when you form a council from the "establishment," the representatives of the disadvantaged, the institutional directors, the lawmakers, the housewives, the erudite, the self-educated, the disgruntled and the complacent. Now you have a real mix of people bringing to the council and planning table their individual prejudices, self-interests and well-established parochial viewpoints. The resulting strife, time-consuming debate and frequent preoccupation with trivia are enough to make one wish for the benevolent health dictator. That, however, is not our way, and it is a real experience to discover how well people of good will can sit down, reason together and eventually arrive at acceptable, workable compromises. The yield from CHP has been small and the cost has been significant, but the progress in organizing and getting under way bodes well for the future. Increasing numbers of consumers and providers have become involved. The success of CHP will be based largely on people involvement.

What then is your role in health planning? Is this something to be avoided or discouraged? As physicians, does your 70-hour week permit you to consider involvement? Is your academic position so demanding or specialized that you can contribute nothing toward planning for the delivery of general health services? Are you "turned off" by the idea of sitting down as a professional with poorly informed consumers? We cannot be all things to all men, but I have a conviction that the physician has a stake in health planning, whether he be a solo practitioner, a member of a group, a salaried private or public employee, a medical educator or a nonpracticing administrator. If it is not already the largest single industry in this country, the health industry will soon take that position. What role do you want our profession to play in the services the health industry will deliver? Do you want a part in the planning or would you prefer a passive role and be planned for? I detect a degree of disinterest that borders on apathy amongst a considerable segment of our profession who, at best, can offer only predictions of failure and the futility of current planning efforts. Others from a position of complacency point out that we now have the best health system in the world and we should keep what we have. I believe our overall system is better than that of any other country, but I am sure that we will not keep that system unless we continually seek to improve it and make certain that its superior advantages are available to everyone. Comprehensive Health Planning, based on a partnership of consumers and providers working together at a community level, is a most effective mechanism in the preservation of our pluralistic system for the delivery of health care.

How then can the individual physician or society of physicians, e.g., The American College of Surgeons, gain entry into health planning? The Congressional Partnership in Health Act gave to each state the task of organizing a state agency. This state agency then encouraged the development of the area agencies which became the primary planners. The state and area agencies have advisory or governing boards which organize task forces to develop plans for attacking special health care problems. These task forces have a membership composed of council o board people plus knowledgeable interested providers and consumers from the community a large. The real action in health planning i within these task forces.

As an example, the State Advisory Counci had an early task force concerned with statewide accessibility to health services. This task force found that a major problem in rural and urban Missouri was the lack of adequate, coordinated, emergency health services. A secondary task force was then organized to develop a State Plan for Emergency Health Care Services This was accomplished and the State Plan wa presented to each of the area agencies for its review, comment and possible implementation. A each step in this process, the advice, expertise and professional talents of the practicing surgeon were essential. Members of your state chapter and of your national staff were actively involved in the development of a coordinated State Plan and with its continued study at the area agency level. In the current and coming year, there will be special attention directed to the development of outpatient services which can improve the delivery of health care and, a the same time, reduce the overall cost. In particular, a task force will be formed to study home health care. Study also will be undertaken of outpatient mechanisms to reduce the rapidly rising costs for inhospital care. This would involve an overall study of ambulatory health care. Of particular concern to you would be the increasing interest in outpatient surgical service and the so-called surgi-centers. Task forces involved in these studies will require the cooperation of private and governmental third-part payors who traditionally accepted responsibilit for inhospital services only.

You will certainly want to know what you state and area agencies are doing and how you may participate in the planning process. It is no ecessary that your participation be ever posi-ive. In most instances, constructive criticism is eeded to cool hasty enthusiasms of those not irectly involved in providing health care. hen you are asked to become a member of a HP Council or Task Force, don't decline the pportunity until you are certain that you have othing to contribute or until you have put the nger on one of your colleagues who is ideally ited for the particular duty. It is not necessary r you to wait to be asked to participate—Vol-nteer! Contact your state or area agency, indi-te your particular interest in the health care eld, ask what has been done and what is planned and request that you be placed on a task force or be allowed to testify before a task force which involves your interest. If you do not obtain action or a satisfactory response, contact a professional peer on the state or area council to intercede for you.

A last concern. Encourage your young members to become involved in this health-planning business. They are the ones whose future will be most affected by the changing world of health care. They are the ones with the time, the talents and the greatest incentives to insure that medicine progresses and health care continually improves.

Continuing Education Coming Events

Oct. 6	**Hematology Workshop—"Cell Morphology"** Continuing Education, M.U. Medical Center Columbia
Oct. 10	**Seminar: Shock** The Ed Bixby Institution for Postgraduate Medical Education Research Hospital and Medical Center, Kansas City
Oct. 11	**Lecture-Discussion Course: Newer Concepts in Psychomatic Medicine** (Six Thursday evenings through November 15) St. Louis University Dept. of Neurology and Psychiatry and Psychoanalytic Foundation of St. Louis Psychoanalytic Foundation Bldg., 4524 Forest Park Blvd., St. Louis
Oct. 12-13	**M.D. Day** Continuing Education, M.U. School of Medicine Columbia
Oct. 23-25	**Symposium: Medicine and Religion—Marital-Sexual Counselling for Clergymen and Physicians** Postgraduate Medical Education, K.U. School of Medicine Kansas City, Kan.
Oct. 25	**Pediatric Quizbox Workshops** Continuing Education, M.U. Medical Center Columbia
Oct. 25-27	**51st Annual Fall Clinical Conference** Kansas City Southwest Clinical Society and School of Medicine and Division for Continuing Education, University of Missouri-Kansas City Crown Center Hotel, Kansas City
Nov. 5-8	**Symposium: Internal Medicine** Postgraduate Medical Education, K.U. School of Medicine Kansas City, Kan.
Dec. 7-9	**Annual Scientific Meeting** Kansas City Society of Ophthalmology and Otolaryngology Plaza Inn, Kansas City

WASHINGTON

Legislation providing federal aid for establishment of a limited number of experimental Health Maintenance Organizations (HMO's) bills advanced in Congress. The House bill was much smaller in scale (five years, $240 million, compared to $805 million) than one passed by the Senate.

In a report on the HMO bill, the House Commerce Committee discussed HMOs and their possible future role in health delivery. No specific number limitation was set in the House bill, but "it is anticipated that the limit of authorizations to $240 million and the reality of the budget and appropriation process will provide an effective ceiling on the number of HMOs which could be established. . . . Generally, however, the committee would anticipate that this legislation would be used to bring to the operating stage approximately 100 new HMOs."

The report stressed a five-year cut off. "All federal assistance to all assisted HMOs will be completed by the end of five years for which authority is given. Thus, there will be no need to extend or renew this legislation in order to meet outstanding commitments."

After a discussion of "many arguments in favor of HMOs," the report said that the committee "is concerned about the fact that HMOs (prepaid group practice, contract practice, etc.) have not grown more rapidly than has been the case." The committee said it hoped that the HMO program would clarify many problem areas, including such basic questions as "will federal assistance to HMOs work?" Other matters of concern were listed such as whether federally-aided HMOs will be able to survive without federal help; how well will such organizations serve the poor, chronically ill and aged; how will they work in ghettoes, rural areas; what about consumer acceptability, quality of services, etc.

Noting that an HMO operates under an income limit (the premiums paid), the committee said one fear is that "it would be possible for an HMO to respond to this limit by discouraging the utilization of its services. For example, the committee is concerned with the possibility that elective surgery, such as cateract extractio in elderly people, might be delayed in situatio where an HMO is experiencing higher than pected utilization. These practices are to be d couraged."

Cautioning against allowing an HMO to ha a monopoly anywhere, the Committee said:

"The heterogeneity of the HMOs envision by the committee is the key characteristic of t HMO program authorized by this legislation a deserves particular comment.

"In preparing the legislation, the committ has attempted not to describe exhaustively or detail a single 'proper' system for the delive of health services. The legislation defines de able qualities or any system for health care livery and offers to support any HMO whi includes these qualities. However, it may structured or organized in detail. *Thus, the H program sponsored by this legislation would represent a single monolithic or federally-co trolled health system, but a series of additio to our existing pluralistic system.*"

The Committee said that one reason there few HMO-type programs operating now "is t high cost of planning, development and init operations. It has been estimated that the gro practice model requires as many as 30,000 rollees before the plan breaks even with as mu premium income as expenses. Planning costs this type of HMO can go up to a half mill dollars. Operating deficits until the break-ev point can amount to $2-$3 million."

Unlike the Senate bill, the House legislat does not preempt state laws that restrict forn tion of HMOs. The reason given by the Ho Commerce Committee was "the rapid cha already underway in state legislation design to remove these barriers . . . (with) . . . appr imately 20 states have already adopted legi tion specifically authorizing HMOs."

Retirement Savings Restriction

The outlook in Congress for a new restrict on retirement savings of professional serv corporations and a companion liberalization the Keogh plan for the self-employed was clou

Opposition to the limitation on the professional service corporations was reported strong in the House, though the Senate was expected to approve it.

The Senate Finance Committee said in its report on the bill that "it is contended that the present law in the retirement plan area creates an artificial incentive for the incorporation of businesses which more traditionally, and perhaps more appropriately, have been conducted in unncorporated form."

The committee restricted the amount an incorporated professional could save for retirement purposes and receive federal income tax deferred on to $7,500 a year and not more than 15% of income. The Keogh plan was liberalized to the ame levels.

Noting that in recent years all states have dopted special incorporation laws which allow professional corporations, the committee said hese "have been used increasingly by groups f professional persons, primarily to obtain the more favorable tax treatment for pensions genrally available to corporate employes." The Inernal Revenue Service's adamant opposition to hese corporations and refusal to recognize them in the so-called Kintner regulations was rejected by the courts until "the service has now acquiesced and generally recognized these proessional corporations as corporations for income ax purposes."

The committee said "the formation of profesional corporations, a practice which has proferated enormously in recent years, has had he effect of circumventing the limitations which Congress intended to impose on deductible conributions by persons who are essentially, in most respects, self-employed."

Explaining why it didn't impose any limit on regular corporation tax deferrals for high-salaried xecutives, the committee said that in corporate lans a "much larger percentage of the contriutions and benefits go to the 'rank and file' emloyes." This "financial drag effect tends to imose practical restrictions. . . ."

VA Bill Into Law

Legislation signed into law by President Nixon extends Veterans Administration medical care to ertain dependents, assures peacetime veterans he right to VA medical care and streamline VA ules on health care delivery. Outpatient medical are for nonservice connected conditions is auhorized when it would avoid the need for hositalization.

The law, effective September 1:

- Extends eligibility for medical care to the wife or child of a person who has a total and permanent disability, resulting from a service-connected condition, and to the widow or child of a person who has died of a service-connected condition. Care will be provided in a manner similar to that in which medical care is furnished by the Armed Forces under the so-called "CHAMPUS program" to dependents and survivors of active duty and retired personnel.
- Removes the requirement for wartime service as a condition of eligibility for VA medical care.
- Liberalizes rules on providing VA outpatient or ambulatory care any veteran who is now eligible for VA hospitalization can be treated as an outpatient as necessary to preclude the need for hospital admission.
- Authorizes direct admission to nursing homes, at VA expense, of veterans requiring nursing home care for service-connected disabilities as stated by a VA physician.
- Specifically authorizes VA outpatient care for all disabilities for veterans with service-connected disabilities rated 80% or more disabling.
- Provides for the National Academy of Sciences to study the staffing of the VA hospitals and report on this subject.
- Extends VA mental health service to the families of veterans when it is related to the mental health or rehabilitation of an eligible veteran.

Buy
U.S. Savings
Bonds

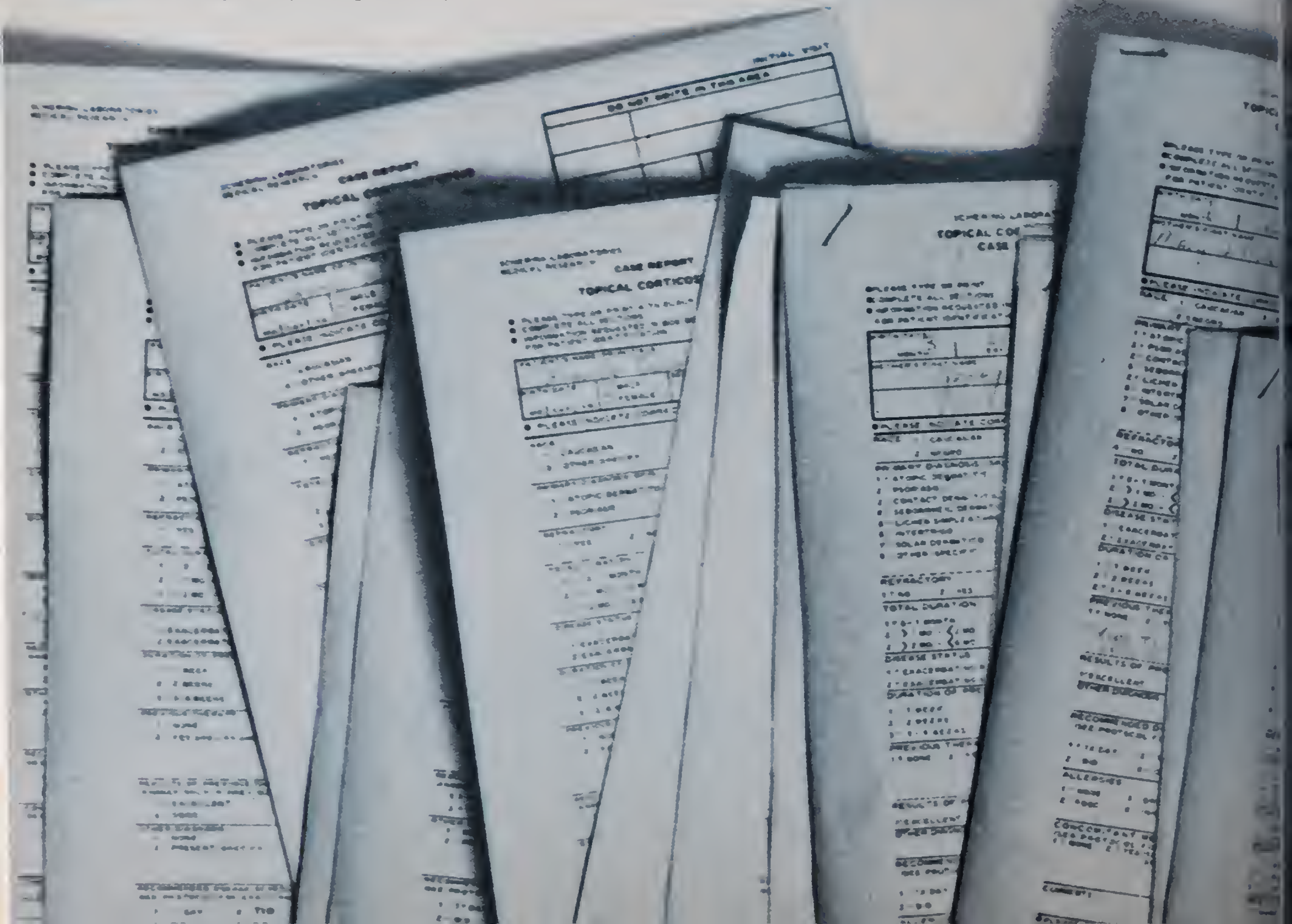
A topical steroid that has clinically succeeded

in study...after study...after study[1-6]

Excellent/good results

85% in psoriasis *(150 of 177 patients)*[1]

92% in atopic ecze *(231 of 251 patients)*[1]


CASE REPORT
TOPICAL CORTICOS
TOPICAL CO
INITIAL VISIT
DO NOT WRITE IN THIS AREA

Schering

Valisone®

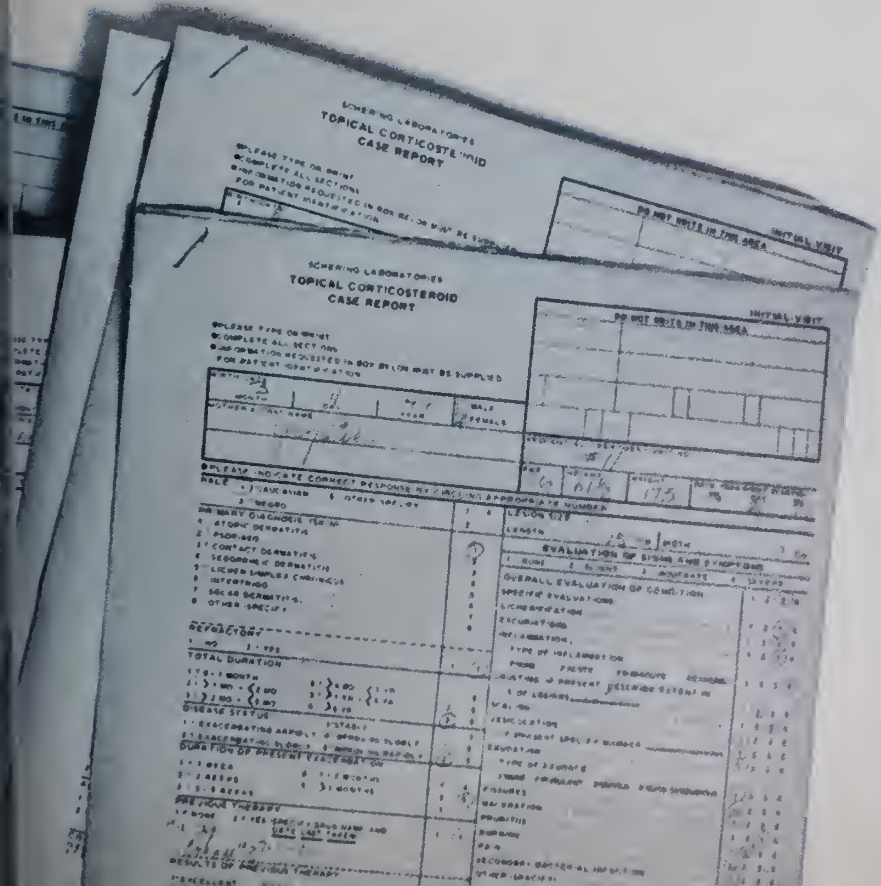
brand of

betamethasone valerate (0.1%) Cream/Ointment

Plus economy *B.i.d. dosage often found effective!*[1]
Available in 5, 15, and 45 Gm. tubes.

% in contact dermatitis

(81 of 84 patients)[1]



SCHERING LABORATORIES
TOPICAL CORTICOSTEROID
CASE REPORT

DO NOT WRITE IN THIS AREA

INITIAL VISIT

CLINICAL CONSIDERATIONS:

Description VALISONE products contain betamethasone valerate (9-fluoro-11_{β}, 17, 21-trihydroxy-16_{β}-methylpregna-1,4-diene-3,20-dione 17-valerate). Each gram of VALISONE Cream 0.1% contains 1.2 mg. betamethasone valerate (equivalent to 1.0 mg. betamethasone) in a soft, white, hydrophilic cream of water, mineral oil, petrolatum, polyethylene glycol 1000 monocetyl ether, cetostearyl alcohol, monobasic sodium phosphate, and phosphoric acid; 4-chloro-m-cresol is present as a preservative. Each gram of VALISONE Ointment 0.1% contains 1.2 mg. betamethasone valerate (equivalent to 1.0 mg. betamethasone) in an ointment base of liquid and white petrolatum, and hydrogenated lanolin. VALISONE Cream and Ointment contain no parabens.

Indications VALISONE Cream and Ointment are indicated for the relief of the inflammatory manifestations of corticosteroid-responsive dermatoses.

Contraindications VALISONE Cream and Ointment are contraindicated in vaccinia and varicella. Topical steroids are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

Precautions If irritation develops with the use of VALISONE Cream or Ointment, treatment should be discontinued and appropriate therapy instituted. In the presence of an infection, the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled. If extensive areas are treated or if the occlusive technique is used, the possibility exists of increased systemic absorption of the corticosteroid and suitable precautions should be taken. Although topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use in pregnant females has not been absolutely established. Therefore, they should not be used extensively in pregnant patients, in large amounts, or for prolonged periods of time. VALISONE Cream and Ointment are not for ophthalmic use.

Adverse Reactions The following local adverse reactions have been reported with topical corticosteroids: burning, itching, irritation, dryness, folliculitis, hypertrichosis, acneform eruptions, and hypopigmentation. The following may occur more frequently with occlusive dressings than without such therapy: maceration of the skin, secondary infection, skin atrophy, striae, and miliaria.

Dosage and Administration Apply a thin film of VALISONE Cream or Ointment to the affected skin areas one to three times a day. Clinical studies of VALISONE have indicated that dosage only once or twice a day is often feasible and effective. AUGUST 1972

For more complete details, consult Schering literature available from your Schering Representative or Professional Services Department, Schering Corporation, Kenilworth, New Jersey 07033.

References: (1) *Files of Headquarters Medical Research Division, Schering Corporation.* (2) *Carter, V. H., and Noojin, R. O.: Curr. Therap. Res.* 9:253, 1967. (3) *Falk, M. S.: Cutis* 2:788, 1966. (4) *Goldblum, R. W.: Pennsylvania Med.* 69:50, 1966. (5) *Nierman, M. M.: J. Indiana M. A.* 10:1184, 1966. (6) *Zimmerman, E. H.: Arch. Dermat.* 95:514, 1967.

SLR-439

in Brief

A summary of AMA, medical & health news

American Medical Association / 535 North Dearborn Street / Chicago, Illinois 60610 / Phone (312) 527-1500 / TWX 910-221-0300

Reports from recent AMA meetings are available on individual audio cassettes. The meetings are the 4th National Congress on Medical Ethics, the National Medicolegal Symposium, the 26th National Conference on Rural Health, and the 7th National Congress on the Socioeconomics of Health Care. Each cassette is $3 for AMA members and medical societies and $5 for others. Write to Department of Radio, TV & Motion Pictures, AMA Headquarters.

Immunization of preschool children is the object of a stepped-up program of the Center for Disease Control. The program will begin in October and is designed to motivate parents to check the immunization status of their children through family physicians and public health clinics. The goal is to immunize 90% of the estimated susceptible children against measles, rubella, polio, diphtheria, tetanus, and pertussis by October, 1976. Aiding the CDC in its effort are the AMA, the American Academy of Pediatrics, American Academy of Family Physicians, American Osteopathic Association, National Medical Association, City and County Health Officers Association, National Center for Voluntary Action and pharmaceutical firms.

Descriptions of more than 1,200 drugs will be contained in the second edition of the AMA's compendium of prescription drugs, *AMA Drug Evaluations*. The AMA's Department of Drugs has prepared the new volume with the advice of more than 300 consultants. It is being published under contract with Publishing Sciences Group, Inc. The cost is $16.50 for AMA members and students and $22 for nonmembers and institutions. Special prices are available for state medical societies wishing to distribute the book free or to sell copies to their members. Direct orders and inquiries to Publishing Sciences Group, Inc., 411 Massachusetts Ave., Action, Mass. 01720.

A 9% increase in the number of physicians registered with AMA's Physician Placement Service was noted in its 1972 statistical report. A total of 4,534 physicians sought locations. The PPS also processed 3,174 applications offering practice opportunities. The report showed an imbalance in supply and demand in the specialty of general or family practice, with 762 opportunities listed and only 303 physicians seeking placement. For copies write Physician Placement Service, AMA Headquarters.

Serving as a clearinghouse, AMA's Legal Research Department is requesting state medical associations to forward all available information on professional liability and professional liability insurance. The material will be assembled and distributed to all state medical associations. Mail information or direct inquiries to Legal Research Department, AMA Headquarters.

A comparative report of sources of AMF-ERF funds for the periods Jan. 1-June 30, 1972 and 1973 shows an overall increase in contributions from $750,774 to $825,474. However, funds donated by some sources were less during the first six month of 1973 than in 1972. Physicians' contributions totaled $174,472 in 1972 and $164,134 in 1973. Funds received from foundations declined from $71,300 in 1972 to $56,050 in 1973. The Woman's Auxiliary to the AMA was the largest contributor in both periods. It has donated $538,182 to AMA-ERF so far this year.

Leading causes of death in the U. S. will be examined in a five-part television series, scheduled to be aired this fall over the Public Broadcasting Service. The programs will be on cancer, heart disease, genetic defects, pulmonary disease and trauma. Among consultants serving on a 23-member medical advisory board will be Irvine H. Page, M.D., chairman of AMA's Advisory Committee on Medical Science, and John S. Farquhar, Jr., M.D., a member of AMA's Committee on Community Emergency Services.

Physicians will be surveyed by the AMA to determine the frequency of therapeutic use of cocaine. In a statement by the AMA's Council on Mental Health and its Committee on Alcoholism and Drug Dependence, the groups said they will also issue a single statement combining information that could be helpful in preventing the misuse of barbiturates.

MSMA NEWS ROUND-UP

OCTOBER, 1973

October designated Immunization Month

)ctober is Immunization Action Month!

n an effort to reverse the alarming trend of eining immunization levels among preschool children against polio, measles, rubella, tet- s, pertussis and diptheria, the Missouri State ical Association is supporting several national nizations cosponsoring Immunization Action th.

mmunization levels have been decreasing in souri and the U.S. over the past few years. Na- al surveys indicate that approximately 5 mil- of the nearly 14 million children aged 1 to 4 unprotected against one or more of the dis- s listed above.

)ne of the most profound declines in immuni- on rates has been for polio. In 1964, the U.S. nunization Survey found that **88 percent** of dren 1 to 4 had received three or more doses olio vaccine. By 1972, this had dropped to **62 cent.**

The National Center for Disease Control is the dinating agency. The AMA, national pediatrics family practice groups, pharmaceutical firms a host of public and private health agencies e joined to carry out a two-phased program increasing immunity levels among preschool dren.

The first phase will initiate a system of im- nization audit within the public and private lth sector with emphasis on preschool children. ail men from drug companies will visit physi- ns and furnish the physicians with audit forms o on the files of preschool children.

The second phase will be a mass campaign to parents to check their childrens' immunization us with their private physician or the public lth clinic and take appropriate steps to have r children immunized when indicated.

Phase two will require mass publicity on the ional, state and local levels. The Center for ease Control will handle the national scene le the Missouri Division of Health will oversee state campaign. It is hoped that private physi- ns in each area will lend as much support as sible to the effort on the local front.

The objective of Immunization Action Month is

Continued on Next Page

MMPAC adds new members to Board

John N. Martin, M.D.
MMPAC Chairman

Several changes in the Rules and Regulations governing the Missouri Medical Political Action Committee were adopted at the summer MMPAC Board meeting in Jefferson City.

The Chairman of the Council of the Missouri State Medical Association and a representative of the Woman's Auxiliary were named ex-officio members of the MMPAC Board, increasing Board membership from 23 to 25. Besides these two, the Board is composed of two members (at least one to be a physician) from each of the 10 MSMA Council Districts and the following ex-officio members: President, President-Elect and Executive Secretary of MSMA.

Another Rules change transferred the MMPAC treasurer from an appointive position by the Chairman to an elective position by the entire Board. Also, membership definitions were changed to allow for broader representation by physicians and friends of medicine.

John N. Martin, M.D., of St. Joseph, who was elected MMPAC Chairman in April, said plans to increase the educational functions of MMPAC are currently being formulated.

Birth, Fertility Rates Fall

The National Center for Health Statistics says the 1972 birth and fertility rates fell to the lowest levels ever in the U.S. The birth rate was 15.6 per 1,000 population and the fertility rate was 73.4 births per 1,000 women in the child-bearing range, 15-44 years old. The infant mortality rate also was down, to 18.2 per 1,000 live births, the lowest ever. Babies born in 1972 also can expect to live longer: 71.2 years. In comparison, American life expectancy in 1900 was only 49.2 years.

MSMA, AMA membership surpass 1972 totals

Membership in the Missouri State Medical Association is nearing the 4,500 mark, according to figures as of Aug. 31.

The final MSMA membership figure will not be known until the end of the year due to new members, transfers and those who drop out. The MSMA had 4,428 members as of December 31, 1972.

Missouri has already surpassed its 1972 paid membership total in the American Medical Association. On December 31, 1972, Missouri had 3,202 paid members of the AMA. However, as of September 15, 1973, the AMA had already received dues from 3,215 Missouri physicians. There are also 350 Missouri physicians who are AMA members, but exempt from dues.

Medical heliport built

A heliport has been constructed adjacent to the Washington University Medical Center, at the corner of Newstead and Clayton Avenues in St. Louis.

The heliport is paved, lighted and available for receiving patients on a 24-hour basis. A fully equipped ambulance is available to transport patients to the various Medical Center institutions.

FAA coordinates for the heliport are Latitude 38 degrees, 38 minutes, 03 seconds north; Longitude 90 degrees, 15 minutes, 24 seconds west; Elevation 414 feet. The Medical Center can be alerted for use of the heliport by calling (314) 367-6400, station 686.

Family Practice figures up

Family practice, a new medical specialty which came into being less than five years ago, is beginning to show tangible results in terms of producing more family doctors, according to a recent survey.

A total of 413 family physicians have graduated from approved family practice residency programs, the survey conducted by the Education Division of the American Academy of Family Physicians shows. Following behind are 1,771 family practice residents in training programs across the country, an increase of 756 over last year.

Of the 1,771 residents, 756 are in the first year of training. There are 653 second-year residents, and 354 entering their third year. The survey also shows that 86 percent of the available first-year positions are filled.

News in Brief

Pan American Doctor's Club

The Medical Society of the Pan American D tor's Club will hold its Annual Meeting, Februa 20-24, 1974, in Huasch, Hidalgo, Mexico.

C. A. McBurney, M.D., of Slater, is Presid of the Club. Hugh A. Hanna, M.D., of Warrensbu is Program Chairman, and T. Reed Maxson, W rensburg, is Secretary-Treasurer. Further inf mation may be obtained by contacting Dr. Maxs

Barnes named Trauma Center

Barnes Hospital will be formally designated a Regional Trauma Center under the program the Division of Emergency Medical Service, Illin Department of Public Health, in ceremonies O ber 11.

Missouri Governor Christopher Bond and Illin Governor Daniel Walker will be guests at the a.m. ceremony at the East Pavilion Building Lob

Family Planning Council

The Missouri Family Planning Health Cou will hold its second Annual Meeting, October at the Hearnes Multipurpose Building in Colum

The Council is concerned with the developm and coordination of family planning services in 106 Missouri counties outside of the Kansas C and St. Louis metropolitan areas.

Melvin M. Schwartz, M.D., of St. Louis Cou is the MSMA representative on the Counc Board of Directors.

Sports Medicine Meeting

The Central States Chapter of the Ameri College of Sports Medicine will hold its ann meeting Dec. 8, 1973, at the University of Kan campus, Lawrence, Kansas.

The Central States Chapter included Misso Kansas, Arkansas and Oklahoma. Further in mation on the one-day meeting may be obtai from Ben R. Londeree, secretary-treasurer, C ACSM, Department of Health and Physical Edu tion, University of Missouri-Columbia, 20 R well Gymnasium, Columbia, Mo. 65201.

Immunization

Continued from Page 1

to immunize a minimum of 90 percent of the e mated susceptible preschool children.

MSMA members are urged to info their office personnel of the upcoming ca paign because if the promotion is a succe many, many patients will be calling for audit of their childrens' immunization cords.

medical melange

Notes of interest from Here . . . . and There

Dr. Bonita J. Peterson, Kansas City, has been appointed as the new medical examiner for Jackson County by County Executive George W. Lehr. Under the county's new charter government, Dr. Peterson became the first woman department head. Her appointment became effective on September 1. Dr. Peterson has served as associate pathologist at Columbia Hospital for Women in Washington, D. C., at the Greater Baltimore Medical Center in Baltimore, Md. in 1964-1967 and at Trinity Lutheran Hospital in Kansas City from 1967 to the present time.

Dr. Joseph A. Zimmerman of Kennett, who has served ten years as chairman
the Governor's Council on Mental Retardation and other Developmental Disa-
lities, was cited for his "compassion, conviction and competence" in helping
e handicapped at a testimonial dinner in his honor at Holiday Inn in Cape
irardeau in August. The dinner was a highlight of the Council's two-day con-
rence. Dr. Zimmerman, who served as chairman in a volunteer capacity, re-
gned for personal reasons.

More than 200 friends attended an open house in Osceola on September 8 to honor **Dr. Ruth Seevers,** who celebrated her 90th birthday on September 6. The event was sponsored by the Business and Professional Women's Club of Osceola. Dr. Seevers also was named "Woman of the Year" by the Club. Since 1881, there has been a Dr. Seevers in Osceola. "Dr. Ruth" has served Osceola patients for the past 67 years.

Dr. Henry E. Oppenheimer, Clayton, attended the International Diabetes
ederation meeting in Brussels, Belgium on July 15-20.—**Dr. Paul A. Brenner**
as honored by the Owensville Lions Club in August in appreciation of his many
ears of service to the citizens of Owensville. Dr. Brenner, who has practiced
edicine in Owensville for 35 years, received the Lions' annual Community
rvice Award.

Dr. Pat A. Barelli, Kansas City, was elected secretary of the American Rhinologic Society at its 19th Annual Meeting held at Crown Center Hotel in Kansas City on August 11.—**Dr. Norman A. Ginsberg,** Kansas City, was presented the Society's Golden Head Mirror Award for Meritorious Sharing in the Service of Rhinology.

Dr. H. Richard McFarland, Kansas City, attended the VIII International
ongress of EEG and Clinical Neurophysiology in Marseille, France on Septem-
r 1-7 and the X Congreso International Neurologia in Barcelona, Spain on
ptember 8-15. He presented a paper at each meeting.

Recommendations[†] on Combination Live Virus Vaccine

American Academy of Pediatrics

Committee on Infectious Diseases

In the September 15, 1971 *AAP Newsletter* sent to Academy members, the Committee on Infectious Diseases of the American Academy of Pediatrics stated its recommendations on the use of combination live virus vaccines. After a careful review of available data, the committee concluded that:

- "This information indicates that the products are both safe and effective when used as directed."
- The vaccine "...can, therefore, be recommended with the obvious advantages of reduction in the number of injections for any given child and a concomitant decrease in the required visits to a physician's office or clinic."

United States Public Health Servi

Advisory Committee on Immunization Practices

In the April 24, 1971 issue of *Morbi*
and Mortality Weekly Report, the Ad
ory Committee on Immunization Pr
tices of the United States Public Hea
Service presented recommendations
the use of combination live virus vacci
The committee stated that:

- "Data indicate that antibody respo
to each component of these combinat
vaccines is comparable with antibody
sponse to the individual vaccines gi
separately.

- "There is no evidence that
verse reactions to the combi
products occur more f
quently or are more sev
than known reactions to
individual vaccines (see
tinent ACIP recommen
tions).
- "The obvious convenie
of giving already selec
antigens in combined f
should encourage consid
tion of using these prod
when appropriate."

[†] For complete text of both recommendations see your MSD representative or write to Professional Service Dept., Merck Sharp & Dohme, West Point, Pa. 19486.

M-M-R*

(MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE | MSD)

Single-dose vials

I-M-R, given in a single injection, fits easily into our routine immunization program for well babies.

iven at age 12 months, M-M-R provides for vaccination early in life against measles, mumps, and rubella.

MSD suggested immunization schedule for well babies

Age	Vaccine(s)
2 months	DPT (diphtheria-pertussis-tetanus) Oral poliomyelitis vaccine (triple)
3 months	DPT[1]
4 months	DPT Oral poliomyelitis vaccine (triple)
6 months	Oral poliomyelitis vaccine (triple)
12 MONTHS	**M-M-R (MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE, MSD)**

his vaccination may be given at 3 months, 5 months, or at 6 months, depending on your preference or on the condition of the child.

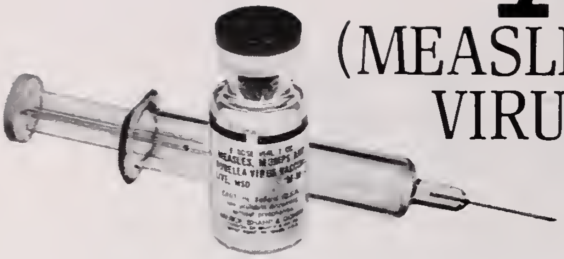
ce vaccination with a live virus vaccine may depress the results of a tuberculin test for four weeks or longer, the test and vaccine should not be given during the same office visit.

*Trademark of Merck & Co., Inc.

For a brief summary of prescribing information, please see following page.

M-M-R
(MEASLES, MUMPS AND RUBELL
VIRUS VACCINE, LIVE | MSD)

Single-dose vials



No untoward reactions peculiar to the combination vaccine (M-M-R) have been reported.

Moderate fever (101–102.9 F) occurs occasionally. High fever (over 103 F) occurs less commonly. On rare occasions, children who develop fever may exhibit febrile convulsions. Rash (usually minimal and without generalized distribution) may occur infrequently.

Since clinical experience with measles, mumps, and rubella virus vaccines given individually indicates that very rarely encephalitis and other nervous system reactions have occurred, such reactions may also occur with M-M-R. A cause and effect relationship, however, has not been established.

Excretion of the live attenuated rubella virus from the throat has occurred in the majority of susceptible individuals administered the rubella vaccine. There is no definitive evidence to indicate that such virus is contagious to susceptible persons who are in contact with the vaccinated individuals. Consequently, transmission, while accepted as a theoretical possibility, has not been regarded as a significant risk.

Must not be given to women who are pregnant or who might become pregnant within three months following vaccination.

Contraindications: Pregnancy or possibility of pregnancy within three months following vaccination; infants less than one year old; sensitivity to chicken or duck, chicken or duck eggs or feathers, or neomycin; any febrile respiratory illness or other active febrile infection; active untreated tuberculosis; therapy with ACTH, corticosteroids, irradiation, alkylating agents, or antimetabolites; blood dyscrasias, leukemia, lymphomas of any type, or other malignant neoplasms affecting the bone marrow or lymphatic systems; gamma globulin deficiency, i.e., agammaglobulinemia, hypogammaglobulinemia, and dysgammaglobulinemia.

Precautions: Administer subcutaneously; do not give intravenously. Epinephrine should be available for immediate use should an anaphylactoid reaction occur. Should not be given less than one month before or after immunization with other *live* virus vaccines; vaccination should be deferred for at least six weeks following blood transfusions or administration of more than 0.02 cc immune serum globulin (human) per pound of body weight, or human plasma.

Due caution should be employed in children with a history of febrile convulsions, cerebral injury, or any other condition in which stress due to fever should be avoided. The physician should be alert to the temperature elevation which may occur after vaccination.

Excretion of the live attenuated rubella virus from the throat has occurred in the majority of susceptible individuals administered the rubella vaccine. There is no definitive evidence to indicate that such virus is contagious to susceptible persons who are in contact with the vaccinated individuals. Consequently, transmission, while accepted as a theoretical possibility, has not been regarded as a significant risk.

Attenuated live virus measles and mumps vaccines, given separately, may temporarily depress tuberculin skin sensitivity; therefore, if a tuberculin test is to be done, it should be scheduled before vaccination, to avoid the possibility of a false negative response.

Before reconstitution, refrigerate vaccine at 2–8 C (35.6–46.4 F) and *protect from light*. Use only diluent supplied to reconstitute vaccine. If not used immediately, return reconstituted vaccine to refrigerator at 2–8 C (35.6–46.4 F), and discard after eight hours.

Adverse Reactions: Fever, rash; mild local reacti such as erythema, induration, tenderness, regi lymphadenopathy; parotitis; thrombocytopenia purpura; allergic reactions such as urticaria; arthr arthralgia, and polyneuritis.

Occasionally, moderate fever (101–102.9 F); less c monly, high fever (above 103 F); rarely, febrile vulsions.

Encephalitis and other nervous system reactions have occurred very rarely with the individual vacc may also occur with the combined vaccine.

Transient arthritis, arthralgia, and polyneuritis features of natural rubella and vary in frequency severity with age and sex, being greatest in adul males and least in prepubertal children. Such r tions have been reported with live attenuated rub virus vaccines. Symptoms relating to joints (p swelling, stiffness, etc.) and to peripheral nerves (p numbness, tingling, etc.) occurring within appr mately two months after immunization should be sidered as possibly vaccine related. Symptoms h generally been mild and of no more than three d duration. The incidence in prepubertal children w appear to be less than 1% for reactions that w interfere with normal activity or necessitate med attention.

How Supplied: Single-dose vials of lyophilized cine, containing when reconstituted not less t 1,000 $TCID_{50}$ (tissue culture infectious doses) measles virus vaccine, live, attenuated, 5,000 TCID mumps virus vaccine, live, and 1,000 $TCID_{50}$ of rub virus vaccine, live, expressed in terms of the assig titer of the NIH Reference Measles, Mumps, and bella Viruses, and approximately 25 mcg neom with a disposable syringe containing diluent and fi with a 25-gauge, 5/8″ needle. Also in boxes of 10 sin dose vials nested in a pop-out tray with a separate box of 10 diluent-containing syringes.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., INC.*, West Point, Pa. 19486*

MS
MERC
SHAR
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Must vasodilators
nd therapy for
ther diseases
ome into
onflict?

ot if the vasodilator is

ASODILAN®

(SOXSUPRINE HCl)

e compatible vasodilator…
o treatment conflicts reported

cerebral or peripheral vascular disease patient often has xisting disease[1] which calls for another drug along with his odilator. It may be a hypoglycemic, miotic, antihypertensive, etic, anticoagulant, corticosteroid, or coronary vasodilator.

odilan is not incompatible with any of these drugs—no treatment flict has been reported. And, unlike other vasodilators, Vasodilan not been reported to affect carbohydrate metabolism, liver tion, or intraocular pressure—or to complicate treatment of etes, hypertension, peptic ulcer, glaucoma, or liver disease.

ct, there are no known contraindications to the use of Vasodilan commended oral doses, other than that it should not be given e presence of frank arterial bleeding or immediately postpartum.

rtler, M. M., et al.: Geriatrics *25*:134-148 (May) 1970.

Indications: Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.
3. Threatened abortion.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.

Dosage and Administration: 10 to 20 mg. three or four times daily.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Adverse Reactions: On rare occasions, oral administration of the drug has been associated in time with the occurrence of severe rash. When rash appears, the drug should be discontinued. Occasional overdosage effects such as transient palpitation or dizziness are usually controlled by reducing the dose.

Supplied: Tablets, 10 mg.—bottles of 100, 1000, 5000 and Unit Dose; 20 mg.—bottles of 100, 500 and Unit Dose.

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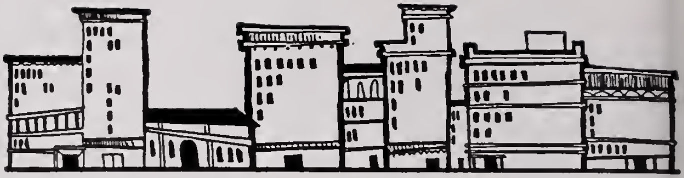
Mead Johnson LABORATORIES

From the Medical Schools



WASHINGTON UNIVERSITY

The Department of Health, Education and Welfare has awarded $347,871 to Washington University School of Medicine to develop and operate a residency program in primary care for internists and pediatricians.

The purpose of the four-year contract is to develop a model graduate training program in primary care utilizing a multispecialty approach to the delivery of family health services. The school must conduct a postdoctoral program that would qualify trainees to take board examinations for certification as internists or pediatricians.

"In our new training program for internists and pediatricians we plan to provide a select group of residents with a realistic view of medical practice," said *Gerald Perkoff*, M.D., professor of medicine and preventive medicine and director of the Division of Health Care Research.

Some of the ambulatory care training will be provided in the Medical Care Group, a prepaid group practice which is under the auspices of the division of Health Care Research.

At least 13 residents will take part in the program during the contract period. Planning of the program as well as initial recruitment of trainees will occur during the first year. Eventually the school plans to have five trainees in medicine and three in pediatrics in a two-year program.

The award was made under the Comprehensive Health Manpower Training Act of 1971 by the Bureau of Health Resources Development of the Health Resources Administration. Similar HEW contracts have been awarded to Boston City Hospital and Stanford University Medical Center.

Washington University Medical Center provided more than $6.3 million in free patient care last year.

Samuel B. Guze, M.D., president of the Medical Center, made the announcement on September 11 at the annual meeting of the Center's board of directors.

The president also mentioned that 54% of all new outpatient visits in the Greater St. Louis area were in this Medical Center, with City Hospitals receiving 17%; St. Louis University hospitals, 12%; St. Louis County Hospital, 7%; and all others, 10%.

Institutions comprising the Medical Center are Barnes Hospital, Barnard Free Skin and Cancer Hospital, the Central Institute for the Deaf, the Jewish Hospital of St. Louis, St. Louis Children's Hospital and Washington University, including its School of Medicine, the Irene Walter Johnson Institute of Rehabilitation, the Mallinckrodt Institute of Radiology, Renard Hospital and the David P. Wohl Jr. Memorial Hospital and Clinics.

Raymond E. Rowland, chairman of the Barnes Hospital board of trustees, was reelected chairman of the Medical Center board of directors. Also reelected were vice-chairman, Henry N. McCluney, vice-president, Anheuser-Busch, Inc. and on the board of Central Institute for the Deaf; secretary, *Norfleet H. Rand*, vice-chairman and treasurer of the board of Interco, Inc., and chairman of the Barnard Hospital Board; and treasurer, *Joseph F. Ruwitch*, president, Renard Linoleum and Rug Co. and on the board of the Jewish Hospital.

Dr. Guze also mentioned that last year's cost of operations was $113 million (up from $86.2 million in 1971), including $63.4 million in salaries for the 8,487 employees. Capital improvements accounted for $15.5 million, and $17.2 was spent for research.

UNIVERSITY OF MISSOURI-COLUMBIA

Environmental pulmonary diseases—respiratory ailments associated with industrial occupations—are of special interest to *Dr. Kaye H. Kilburn*, new chief of the Pulmonary Division at the UMC Medical Center and Columbia Veterans' Administration Hospital.

"Missouri has a large number of dust-making occupations, among them sandblasting in St. Louis, cotton-raising in Southeast Missouri, mining in Rolla and Joplin, brick-making in Central Missouri and several others. I hope to establish a liaison with the Missouri State Board of Health as I did with the board in North Carolina so we can work together to reduce the respiratory hazards peculiar to these occupations," Dr. Kilburn said.

Dr. Kilburn's dual responsibility to the Medi-
l Center and Veterans' Hospital is part of an
erall sharing agreement between the two in-
itutions. While the majority of intensive res-
ratory care for patients of both hospitals will
done in the Veterans' Hospital, Dr. Kilburn
d his staff will also supervise a pulmonary
ation at the Medical Center and laboratory
cilities there and carry out a teaching program
r UMC physicians and students between the
o hospitals.

Dr. Kilburn is the first chief of the newly-
eated pulmonary (chest) division of the De-
rtment of Medicine. His staff includes *Dr.*
aniel Hurst, assistant professor of medicine,
rmerly of Duke University; *Dr. Arnold Hud-*
n, pulmonary fellow from Duke University,
r. Ricardo Cordon, pulmonary fellow from the
Hospital in Baltimore, Md., as clinician in-
stigators and research scientists; *Dr. Charles*
illiams, assistant professor of medicine and as-
ciate professor of agricultural chemistry, a
ochemist from the University of Wisconsin;
. Sharon Northup, a research associate bio-
emist from UMC; *Wayland McKenzie,* re-
rch associate from Duke University, who is
charge of the animal model exposure labora-
y; and *Patricia Adshead,* research assistant
cializing in tissue culture.

Dr. Kilburn plans to implement a number of
ovative patient care, educational and research
grams. A 20-bed pulmonary unit located at
Veterans' Hospital, accessible to both VA
l Medical Center patients, includes a ten-bed
piratory intensive care unit equipped with
cial monitoring equipment. He encourages
rses who are interested in working in lung
dicine and especially intensive care to contact
n.

r. Brent M. Parker has joined the Division
Cardiology at the University Medical Center.
rmerly associated with Washington Univer-
's medical school in St. Louis, Dr. Parker
l serve as chief of clinical cardiology and pro-
sor of medicine. He will assume responsibil-
s for the medical students' elective program
ardiology and will direct some of the testing
cedures for patients with heart ailments.

ane Brinton, R.N., who has been assistant to
ring Dean Ruby Potter at the School of Nurs-
, University of Missouri-Columbia, has been
ointed Interim Dean of the nursing school.
s Brinton will serve until the appointment of
ermanent dean. The School of Nursing, here-
ore under the administration of the School of
dicine, has recently been established as an autonomous unit on the Columbia campus of the University.

ST. LOUIS UNIVERSITY

Dr. Paul A. Young has been named chairman of the Department of Anatomy at the St. Louis University School of Medicine.

Dr. Young

A member of the medical faculty since 1957, Dr. Young is professor of anatomy and associate professor of neuroanatomy in neurology. He has served as Acting Chairman of the Department since 1969. He holds a B.S. and M.S. degree in Anatomy earned at St. Louis University in 1947 and 1953. He earned the Ph.D. degree in Anatomy at the University of Buffalo. He teaches Neuroanatomy and Gross Anatomy at the School of Medicine and also is actively engaged in research in which he utilizes the electronmicroscope.

He is the author of more than 40 publications on various subjects related to the brain, including the pathology of nutritional disorders, and the anatomic basis for function. Dr. Young was the recipient of the Gibson Anatomical Society honor award in 1957.

Dr. Maurice Green, professor and director of the St. Louis University School of Medicine's Institute for Molecular Virology, and his son, Michael Green, attended the meeting of the NATO Advanced Study Institute in Monte Carlo on September 3-9. Dr. Green was invited to present a paper. His son, the only undergraduate student attending the meeting, was awarded a stipend from NATO Advanced Study Institute. He is a junior at the University of Wisconsin and spends his summers working in the Institute for Molecular Virology laboratories. Dr. Green earned the M.S. and Ph.D. degrees in biochemistry at the University of Wisconsin.

St. Louis University Medical Alumni celebrating reunions are invited to attend the annual Dean's reception in Glennon Hall on October 25 from 4 AM to 6 PM during Founders Week. A scientific program will be held from 10 AM to 12-noon on October 26. The annual reunion dinner will be held at the Stadium Club with a cocktail party beginning at 6:30 PM and a dinner at 8 PM on October 27. An all alumni reunion will be held in the Sesquicentennial Room of the Busch Memorial Center beginning at 7 PM.

ANNUAL FALL PANEL DISCUSSION

"Surgical Infections"

THE ST. LOUIS SURGICAL SOCIETY

Harvey Barnard, M.D.
Albany Medical Center
Albany, New York
"GUEST MODERATOR"

J. Wesley Alexander, M.D.
Shriners Burn Institute
Cincinnati, Ohio

William Burmeister, M.D.
St. Louis, Missouri

Richard Clark, M.D.
St. Louis, Missouri

TUESDAY, NOVEMBER 6, 1973
5:30 PM

ST. LOUIS MEDICAL SOCIETY
AUDITORIUM

All Members of the Profession Invited

AMA Sponsors National Conference on Alcohol Abuse

Physicians from throughout the nation wi participate in an American Medical Associatior sponsored conference on medical complication of alcohol abuse on October 11-12 at the Wasl ington Hilton Hotel in Washington, D. C.

The two-day conference will be directed t physicians on diagnosis, management, treatmen rehabilitation and community resources for th alcoholic person.

"We hope to interest many more physicians i the problems of alcohol abuse," said Herbe Raskin, M.D. of Southfield, Mich., chairman (the AMA's Committee on Alcoholism and Dru Dependence.

The conference will be cosponsored by th Veterans Administration, the National Institut on Alcohol Abuse and Alcoholism and the N tional Council on Alcoholism. The program is be ing coordinated by William M. Lukash, M.D White House physician.

Physicians attending the conference will r ceive 13 hours of continuing education credi toward the AMA Physician's Recognition Awar program and 13 hours of elective credits in th continuing education program of the America Academy of Family Practice.

Conference speakers will cover such topics how to diagnose alcoholism, how to identify th potential alcoholic early, current approaches t treatment, biochemical features of alcohol i man, direct poisonous effects of alcohol, cause (death in alcoholics and management of acu medical emergency in alcohol abuse.

Further information on the conference is avai able from the Department of Mental Healtl American Medical Association, 535 N. Dearbo St., Chicago, Ill., 60610.

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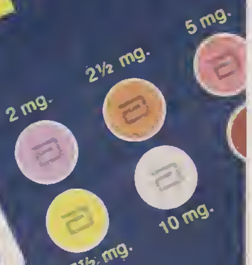
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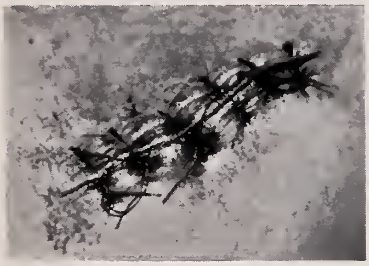

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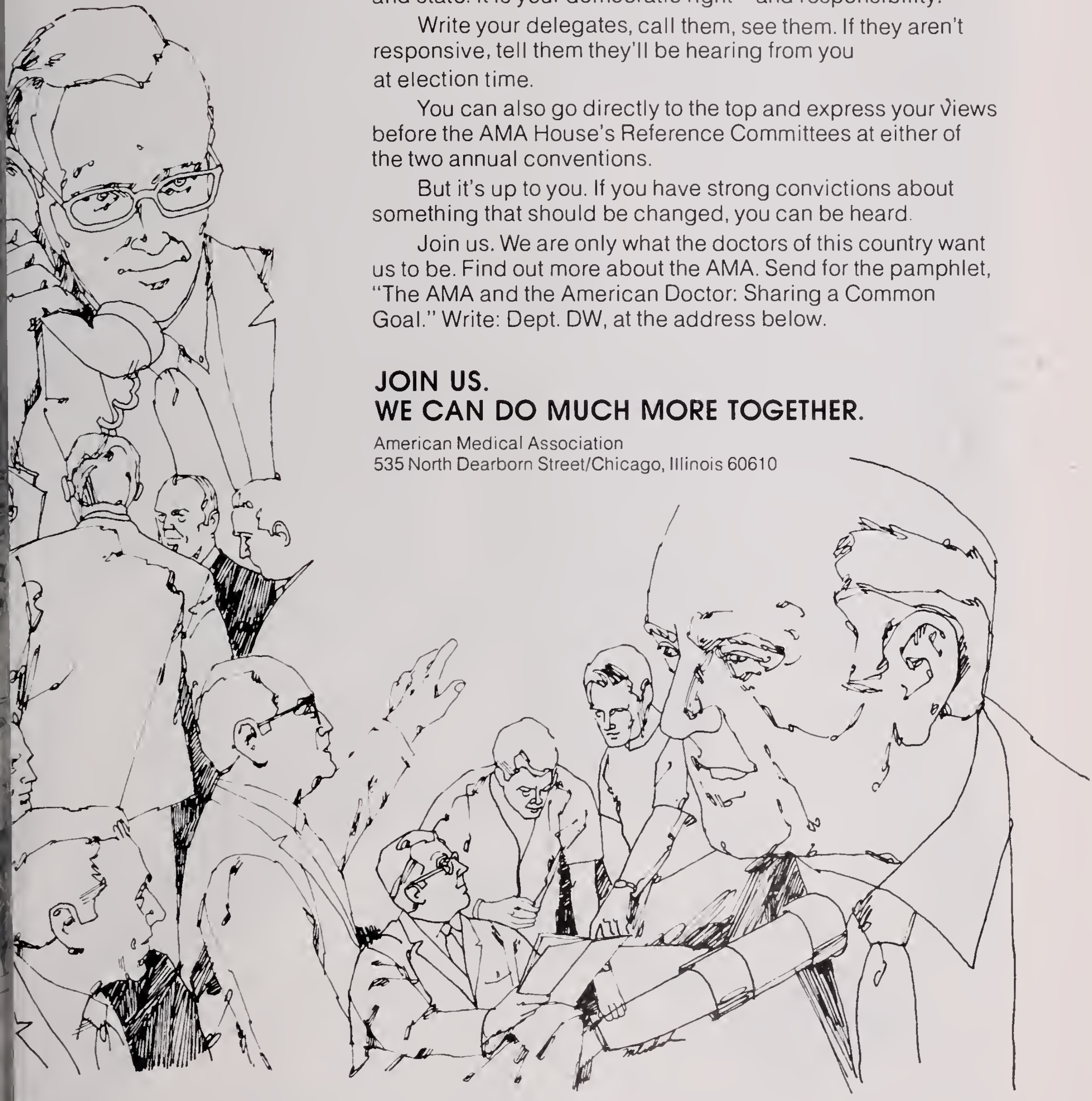

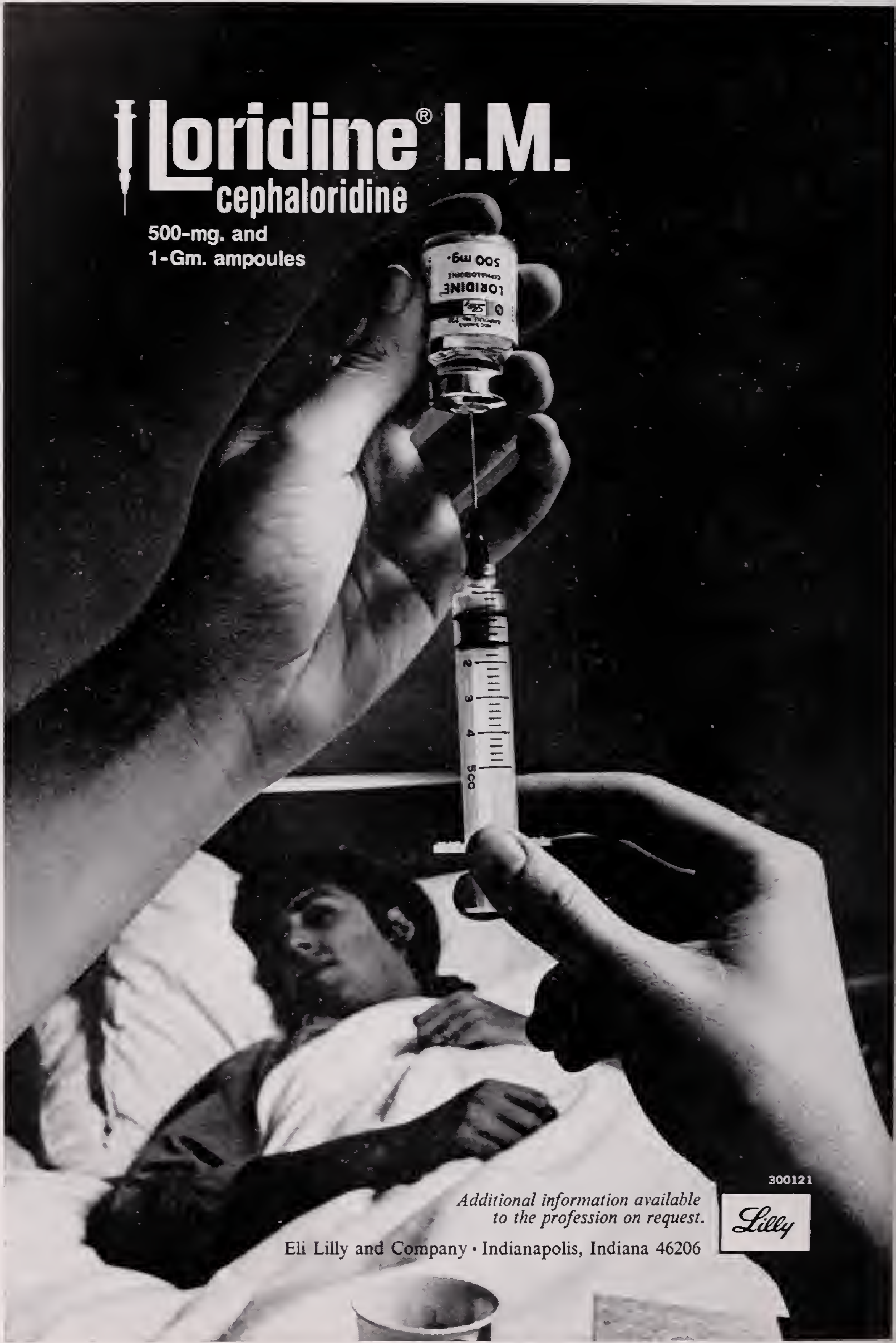

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Missouri Medicine

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PHILIP C. ANDERSON, M.D., *Columbia*

What's New in Loxoscelism?

LOXOSCELISM is the medical disorder caused by nvenomation during the bite of the brown ecluse spider, Loxosceles reclusa. Prior to 1957, vhen the disease first was defined in the medical iterature, these necrotic spider bites often were onsidered to be severe infections, and antibi- tics were the usual treatment. Approximately decade was spent refining the correct clinical escription and assembling anecdotal reports bout the prognosis using corticosteroid therapy.

In the past two years, laboratory research has lucidated several basic aspects of loxoscelism in an and animals, leading to more explicit clini- al analysis and, currently, to a thorough re- valuation of therapy.[1, 2]

ROGRESS IN IMMUNOLOGY

Millikan and Berger[2] from our department ave devised a specific in vitro test for the diag- osis of loxoscelism. The test exposes the fresh mphocytes of the patient to minute doses of oxosceles venom, in vitro, with radioactive ymidine present. Only if the patient has pre- ously been envenomated will the lymphocytes ansform to distinctive blast forms and, in doing , incorporate thymidine proportionally into eir nucleoprotein. The test is quantified by the mount of radioactive counts from the washed mphocytes. The test is sensitive and highly curate, but it is applicable only to the con- lescent case. The result is that many mild own spider bites, which were formerly not agnosable, now can be recognized. The only ay to distinguish clinically among most types mild insect or arachnid bites is by lymphocyte nsformation studies. Because we know that all recluse spider bites are not necrotic, we must devise proper staging of cases and reevaluate both conservative and vigorous therapy.

From studies with rabbits, we have learned that natural immunization is the result of repeated small doses of venom. Active immune protection against the venom seems probable in humans. Passive immunity conferred by a traditional antivenin seems possible, but it has not been achieved in our early attempts. People whose work exposes them repeatedly to Loxosceles may benefit from preventive immunization.

PROGRESS IN PATHOPHYSIOLOGY

In the rabbit, the important cellular events in the skin after envenomation have been studied with the electron microscope. The cause of the necrosis in necrotic arachnidism is endothelial

This timely article reports research progress on loxoscelism and includes the ongoing reevaluation of treatment for the milder bites. The information relating to childhood loxoscelism cases has not been published previously. The author predicts that in view of recent research, medical progress in the next three years will probably include immunization, a better means for recognizing severe systemic loxoscelism earlier and a better specific mode of early treatment. Dr. Anderson is Professor and Chairman, Division of Dermatology, University of Missouri-Columbia School of Medicine.

damage beginning as early as three hours after injection of venom. This injury is followed by thrombocytopenia, lowering of fibrinogen levels and prolongation of clotting time as thrombi occlude the small vessels. Apparently, damage to the blood vessels directly by the venom activates the clotting cascade which interacts with local tissue mediators of inflammation to give the characteristic clinical progression of necrotic arachnidism. In the rabbit, heparin will not prevent the thrombotic reaction. Neither aminocaproic acid nor corticosteroids modify the early disease in the rabbit, so severe is the original injury to the blood vessels. Larger amounts of venom do not produce a sustained coagulopathy in rabbits. In humans, heparin does appear to protect against disseminated intravascular coagulation, which is an important complication.

PROGRESS IN CHEMISTRY OF THE VENOM

Campbell and Barrett at the University of Missouri have shown that Loxosceles venom is composed of about eight separable proteins, most of which are enzymes.[3,4] One principle enzyme is hyaluronidase or the classic "spreading factor." The important necrotizing factors which actually attack the endothelium in humans are not enzymes, but the mechanism of their action isn't known. Recognition of the specific necrotizing protein may prove important in devising simple and effectively early treatment.

PROGRESS IN CLINICAL MEDICINE

In children, case reports of loxoscelism presented only alarmingly severe or fatal reactions. A more careful collection of all childhood loxoscelism cases during the summer of 1972 indicated a benign prognosis is more usual. The youngest child in my series was four, the oldest 14; 16 children were evaluated. Particular attention was given to platelet counts and cell-free serum hemoglobin levels. No important hematologic disorders or other defects were found, and all the children recovered without any disability. I have had no personal experience with loxoscelism in children under two years old. Aside from close observation, no special therapy or unusual procedures are indicated for loxoscelism in children.

Discovery of these neglected, insignificant brown recluse spider bites is an important result of the diagnostic lymphocyte transformation test. When we were unable to diagnose with certainty any cases of loxoscelism other than the most severe, then vigorous therapy was indicated routinely and the prognosis was always poor. Now we are aware that many, even most, bites are mild, resolve spontaneously and leave no scar. Even small necrotic bites may be left safely untreated. I would prescribe large doses of corticosteroids only to treat severe or large bites and for those patients with systemic effects as shown by generalized cutaneous purpura, extreme leukocytosis, thrombocytopenia, headache, fever, malaise, or any evidence of early disseminated intravascular coagulation (DIC). In the case of suspected or impending DIC, immediate hospitalization and the early use of heparin is our present policy.

Accurate clinical staging of spider bites has not been devised and agreed upon as yet. The following preliminary guidelines are used in our department:

Generally, the rate of progression and the size of the painful indurated area are used for basic staging. If a recluse spider bite evolves slowly to an indurated firm plaque in 12 to 24 hours and becomes stable and if the plaque at 48 hours is 6 cm or less without necrosis, then complications will be few and treatment may consist of analgesics and a tetanus toxoid booster. Corticosteroids are not needed. If the plaque progresses very quickly (four to 12 hours) or if the solid area exceeds 10 cm with necrosis, I would wish for my own spider bite to be treated with 80 mg of triamcinolone suspension infiltrated, 20 mg in each quadrant about the bite, although this line of treatment clearly is not effective for loxoscelism in the rabbit. Support for this method of local steroid treatment is based solely on clinical experience with humans and is open for review as to efficacy. For severe systemic loxoscelism, I favor 100 mg of triamcinolone orally given daily with close observation, which will include blood counts and urinalysis to detect any coagulopathy or nephropathy. Again, the justification for this treatment is our clinical experience. Pain around the bite and the severe malaise, especially the headache and the generalized purpura, are benefitted by systemic steroids, without much doubt. The more important question is whether systemic steroids will reduce the area of necrosis, minimize tissue injury or hasten healing in humans. These questions must be answered by further elucidation of the biochemistry of necrotic arachnidism and a detailed description of the coagulopathy because valid clinical comparison of therapy in humans is not possible.

PROGRESS IN ENTOMOLOGY

A foremost national expert on Loxosceles is the

(Continued on page 718)

PAUL E. SAUER, M.D., ALAN H. BAILEY, M.D. *and*
AHMED ELKADI, M.D., *Springfield*

Stroke Prevention by Recognition and Treatment of Extracranial Carotid Disease

Case Reports

A CEREBRAL INFARCTION can produce a catastrophic stroke with paralysis, coma and death. As early as 1823, the association of extracranial vascular disease and cerebral dysfunction was reported in the medical literature.[1] In 1954, Eastcott *et al* reported a successful carotid reconstruction for transient cerebral ischemia.[2] Eighteen years later and despite numerous reports, it cannot be said that the literature contains clear guidelines as to the selection of patients for arteriography or satisfactory conclusions with regard to their interpretation.[3] The dilemma of patient selection is quite unfortunate since Fields found that 74% of the patients with cerebral vascular insufficiency had surgically accessible lesions.[4] Arterial stenosis due to atherosclerosis is particularly frequent at the origin of the internal carotid arteries.[5]

The following case reports are presented to illustrate the necessity of developing the proper criteria for selection of patients for arteriography and interpretation of their results.

CASE REPORTS

Case #1. (Fig. 1) An 88-year-old woman had severe disabling dizziness for two years, with a recent blackout spell. Her carotid pulses were palpable bilaterally and there was a bruit over the right carotid artery. An aortic arch study with cerebral angiography showed significant atherosclerotic disease with 50% to 60% narrowing of the right carotid bifurcation. A right carotid endarterectomy was performed and, at operation, a thick calcified plaque was found containing a large amount of necrotic and amorphous atheromatous material causing approximately 80% stenosis. Within a few hours after the operation, the dizziness had completely disappeared. The patient continues to do well without any residual or recurrent symptoms.

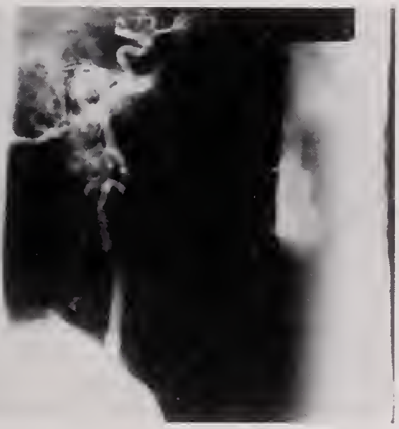

Fig. 1 An 88-year-old woman with disabling diziness showing 50% to 60% narrowing at right carotid bifurcation.

Comment

This case shows that advanced age, as such, is no contraindication to operation. It also shows that the soft necrotic atheromatous material at the site of disease usually cannot be identified on the arteriogram. Stenosis in the range of 60% to 95%, such as in this case, is usually associated with a bruit, while stenosis above or below that range may fail to develop one.

Case #2. (Fig. 2) A 66-year-old man had a blackout spell while driving his car and, conse-

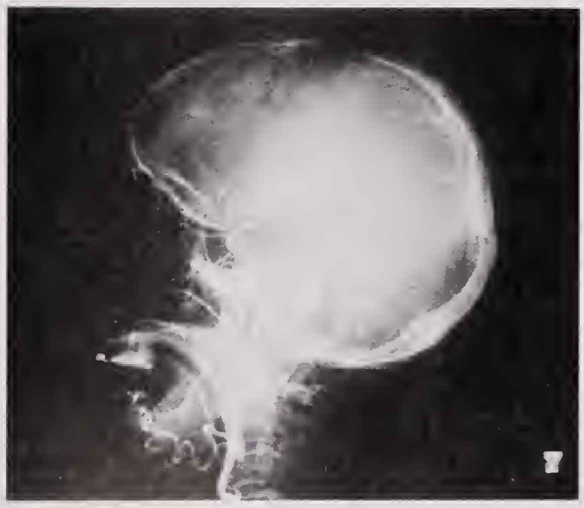

Fig. 2 A 66-year-old man with blackout spell showing 99% obstruction of left internal carotid.

The stroke has assumed national prominence today as a leading killer and a source of government expenditure. Basic diagnosis and elimination of nonlocalizing diagnostic tests can do much to simplify the stroke problem and prevent unnecessary deaths. The authors present six case reports to illustrate the necessity of developing the proper criteria for selection of patients for arteriography and interpretation of their results. Drs. Sauer and Dr. Elkadi are in the private practice of cardiac-vascular and thoracic surgery. Dr. Bailey is in the private practice of thoracic surgery.

quently, hit a tree and sustained head and chest injuries. He recovered within a few days with only minimal residual weakness of his right side. The patient had palpable carotid pulses bilaterally and there was a bruit over the right carotid artery; no bruit was present on the left side. An aortic arch study with cerebral angiography showed more than 99% obstruction of the left internal carotid artery and 80% to 90% stenosis of the right carotid artery. Left carotid endarterectomy was performed and, at operation, a heavily calcified plaque was found which, at its distal end, completely occluded the lumen. Excellent back flow followed removal of the plaque. Within the following 48 hours, the patient noticed progressive improvement of his right side and his general mental condition. Later in the postoperative period, the patient started noticing transient numbness and tingling of his left side, indicating progressive obstruction of the right carotid artery. Subsequently, an endarterectomy was done on the right with complete recovery of all symptoms.

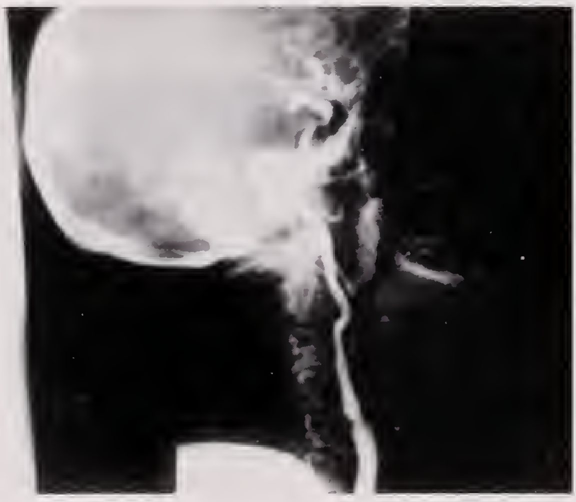

Fig. 3 A 67-year-old man with impending stroke showing a shallow, smooth plaque causing 15% stenosis of the right carotid bifurcation and a 70% to 80% stenosis at the cavernous sinus.

Comment

This case shows that the more severe stenosis had no bruit while the less severe one did. It also points to the need for correction of bilateral lesions despite the presence of collateral circulation.

Case #3. (Fig. 3) A 67-year-old man was admitted with impending stroke with left hemiparesis and numbness of the left face. The patient had been having transient attacks of similar symptoms lasting for a few minutes for more than one year. On the night of admission, the attacks became more frequent and the last attack did not subside. He had good carotid pulses without bruits. An aortic arch study with cerebral angiography revealed a shallow smooth plaque causing about 15% stenosis of the right carotid bifurcation and another 70% to 80% stenosis of the intracranial portion of the right internal carotid artery at the cavernous sinus. A right carotid endarterectomy was performed and, at operation, an ulcerated atheromatous plaque was found containing two shallow ulcers with rough, irregular bases. Within a few hours after endarterectomy, the patient had significant improvement of his left hemiparesis, which completely subsided within 48 hours. The numbness of the left side of his face showed considerable improvement, although there is still a minimal residual numbness in a small part of the left face which is continuously decreasing.

Comment

This case shows that the smooth appearance of the atheromatous plaque on the arteriogram does not rule out the presence of plaque ulceration with thrombus formation and repeated thromboembolism. The rapid onset of improvement indicates that at least part of it was due to immediate improvement of blood flow and perfusion pressure which was needed to overcome the distal stenosis of the same vessel.

Case #4. (Fig. 4) A 69-year-old woman had progressive severe numbness of both feet for three weeks and no other neurologic symptoms. She had good carotid pulses without bruits. Other physical findings were normal. An aortic arch study with carotid arteriograms showed minimal atherosclerotic change with slight narrowing of both internal carotid arteries at their origin, being more prominent on the right. A right carotid endarterectomy was performed and, at operation, a thick tubular calcified atheromatous plaque was found with several rough areas and calcium deposits on the inside. There were, however, no definite ulcerations. The plaque caused approximately 20% stenosis of the arterial lumen. Within less than 24 hours after the endarterectomy, the

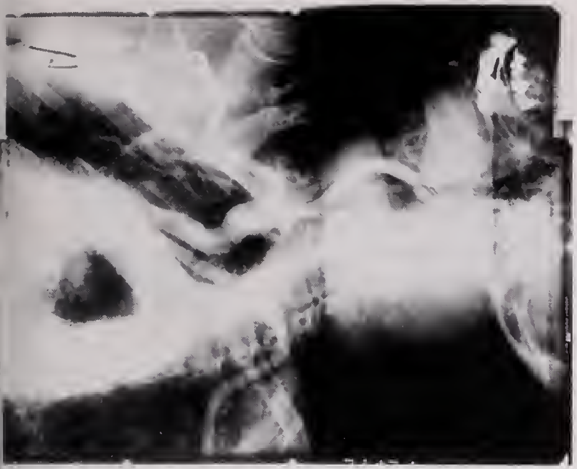

Fig. 4 A 69-year-old woman with progressive numb-ness of both feet showing slight narrowing of both in-ernal carotid arteries.

umbness of the feet had completely disappeared. he patient continues to do well without any residual r recurrent symptoms.

omment

This case illustrates that apparent mild arterio-raphic changes do not rule out the presence of clinically significant lesion. The same applies to he absence of carotid bruits.

Case #5. (Fig. 5) A 63-year-old man had dizzy pells associated with a tendency to fall to the left de for three weeks. The physical findings were nor-al. The carotid pulses were palpable bilaterally ithout bruits. An aortic arch study with cerebral ngiography showed a plaque at the origin of the ght internal carotid artery with apparent ulcera-on, causing only minimal stenosis. A right carotid ndarterectomy was performed and, at operation, n ulcerated plaque was found at the origin of the ternal carotid artery which caused approximately % stenosis of the arterial lumen. The pressure was easured in the common and internal carotid ar-ries, as well as in the flow rate in the internal rotid artery before and after the endarterectomy. efore the endarterectomy, the systolic pressure was 4 in the common carotid and 80 in the internal rotid, that is a 14 mm of mercury gradient across e stenosis. In other words, there was a 15% de-ease of pressure in the internal carotid artery. The w rate of the internal carotid artery was 210 cc ean flow and 310 cc peak flow. After the endar-rectomy, there was no pressure gradient between e common and the internal carotid arteries. The w rate in the internal carotid artery increased to 0 cc mean flow and 560 cc peak flow.

Within a few hours after the operation, the patient ticed improvement of his dizziness which com-etely disappeared during the second postoperative day. The patient continues to do well without any residual or recurrent symptoms.

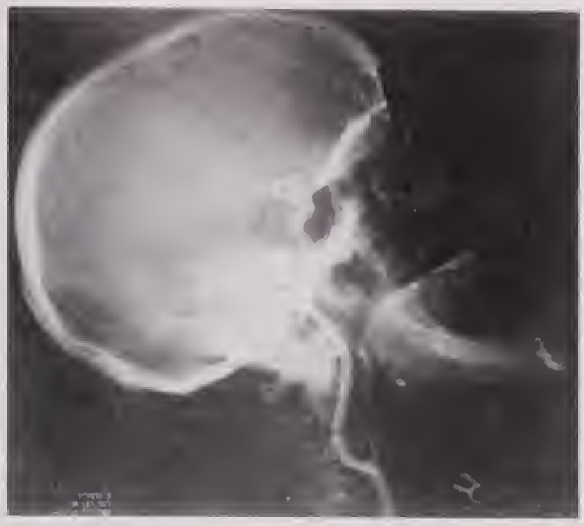

Fig. 5 A 63-year-old man with dizzy spells and a tendency to fall to the left showing an apparent ulcerated plaque causing only minimal stenosis of right internal carotid artery.

Comment

This case documents the immediate considerable increase of flow after removal of shallow plaques causing only mild or minimal stenosis. A 15% increase of pressure was followed by approximately 100% increase of flow rate.

Case #6. (Fig. 6) A 64-year-old woman had an onset of transient cerebral ischemia with memory loss on September 25. She underwent neurological evaluation elsewhere and refused diagnostic tests. Subsequently, she improved until October 12, when she had a massive stroke with unconciousness and right hemiplegia. Since then, she has had some improvement but is unable to talk and continues to have paralysis on the right side. On October 30, she developed gangrenous changes in her right foot. Physical examination revealed equal carotid pulsations and no bruits. Dorsalis pedes and posterior tibial pulses were absent in the right foot with gangrenous changes present. An aortic arch study showed normal vertebrals and a normal right internal carotid artery. The left internal carotid artery had 40% occlusion at its origin. A subsequent liver biopsy (needle) revealed a metastatic adenocarcinoma, probably of gastrointestinal origin. The patient was transported home with no further therapy recommended.

Comment

In retrospect, this patient's prognosis was grave because of the widespread malignancy. Concentrating on the neurologic changes alone, how-

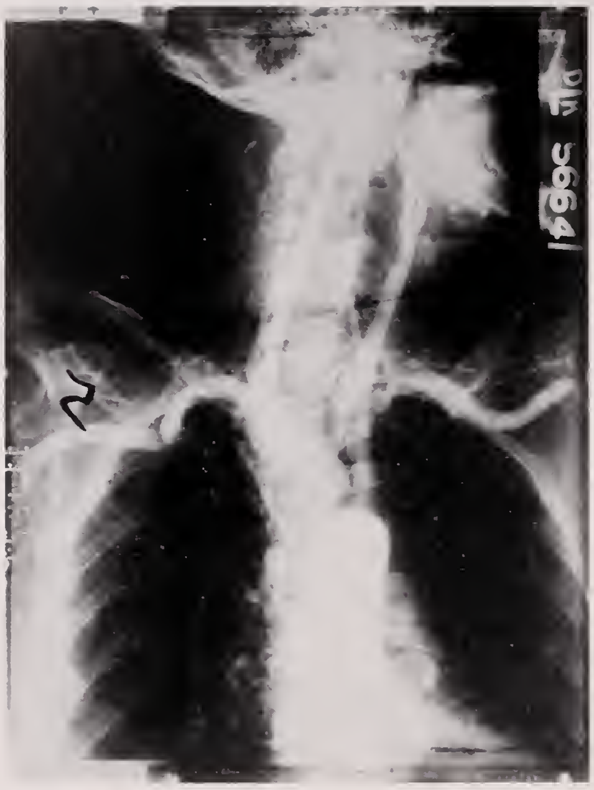

Fig. 6 A 64-year-old woman with transient ischemia followed by a massive stroke with hemiplegia on the right side showing 40% occlusion of the left internal carotid artery.

ever, one wonders whether correction of the left carotid lesion could have prevented her cerebral infarction.

Results

The results of our own patients' experiences indicate that the patients with transient ischemic attacks and without a history of a stroke, whether it is chronic, acute or incipient, are the best candidates for corrective carotid surgery. Out of a total of 55 patients on whom we performed endarterectomies, 37 had only transient ischemic attacks without a history of stroke. This group of patients had no mortality and no morbidity. Fourteen endarterectomies were performed in patients with a history of a chronic stroke. In this group, two died due to causes related to cerebrovascular disease and one died due to an unrelated cause, a massive recurrent myocardial infarction two weeks following the endarterectomy. A small group of four patients with acute or incipient stroke were operated on and one died due to progressive deterioration of his acute stroke. All the surviving patients of all three groups improved following the endarterectomy. In eight patients (approximately 15%), improvement was only partial, requiring treatment with drugs for further control of residual symptoms. In the remaining 85%, the improvement was complete or satisfactory and did not warrant drug therapy.

Discussion

In a busy medical practice, diagnosis and possible corrective surgery for extracranial carotid disease (E.C.D.) is often denied the patient for several reasons. Dizziness, a common symptom of generalized cerebral ischemia, is often attributed to such entities as inner ear trouble or cerebral arteriosclerosis. These unfortunate patients are treated with meclizine hydrochloride-niacin (Antivert), diphenylhydantoin (Dilantin), nicotinic acid preparations and other so-called vasodilators. Another group of patients present with a transient cerebral ischemic attack, the so-called light stroke. These patients usually are advised to take it easy and the event is soon forgotten. Unfortunately, the bruit has become the hallmark of ECD to many physicians, and the absence of a bruit eliminates consideration of the ECD.

The patient referred to a specialist for evaluation for cerebral ischemia in many cases is put through a battery of diagnostic tests that may include electroencephalography, Doppler examination, dermothermography, computer bruit analysis, ophthalmodynamometry and others. These tests do not delineate the pathology, are costly and prolong hospitalization.

Indications for aortography to evaluate peripheral and cardiac disease are now fairly clear. Yet the reluctance to perform cerebral angiograph even today is evidenced by the number of the so-called noninvasive techniques. Some still consider cerebral angiography to be a great risk t the elderly person with arteriosclerosis, and carotid disease may remain undiagnosed.[4] With refinement in technique, cerebral angiography is no done under local anesthesia at a low mortality.[6,] The joint study of extracranial arterial occlusio reported more than 4,000 studies with a mortality rate of .5%.[8] At St. John's Hospital and Leste E. Cox Medical Center, there was no mortality i more than 330 consecutive aortic arch studies. Angiography is the only manner in which lesion may be identified and localized. Without identification and localization, a proper form of therapy cannot be contemplated.

Wood states that more than 50% narrowing o the vascular lumen by plaque formation is neces

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Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

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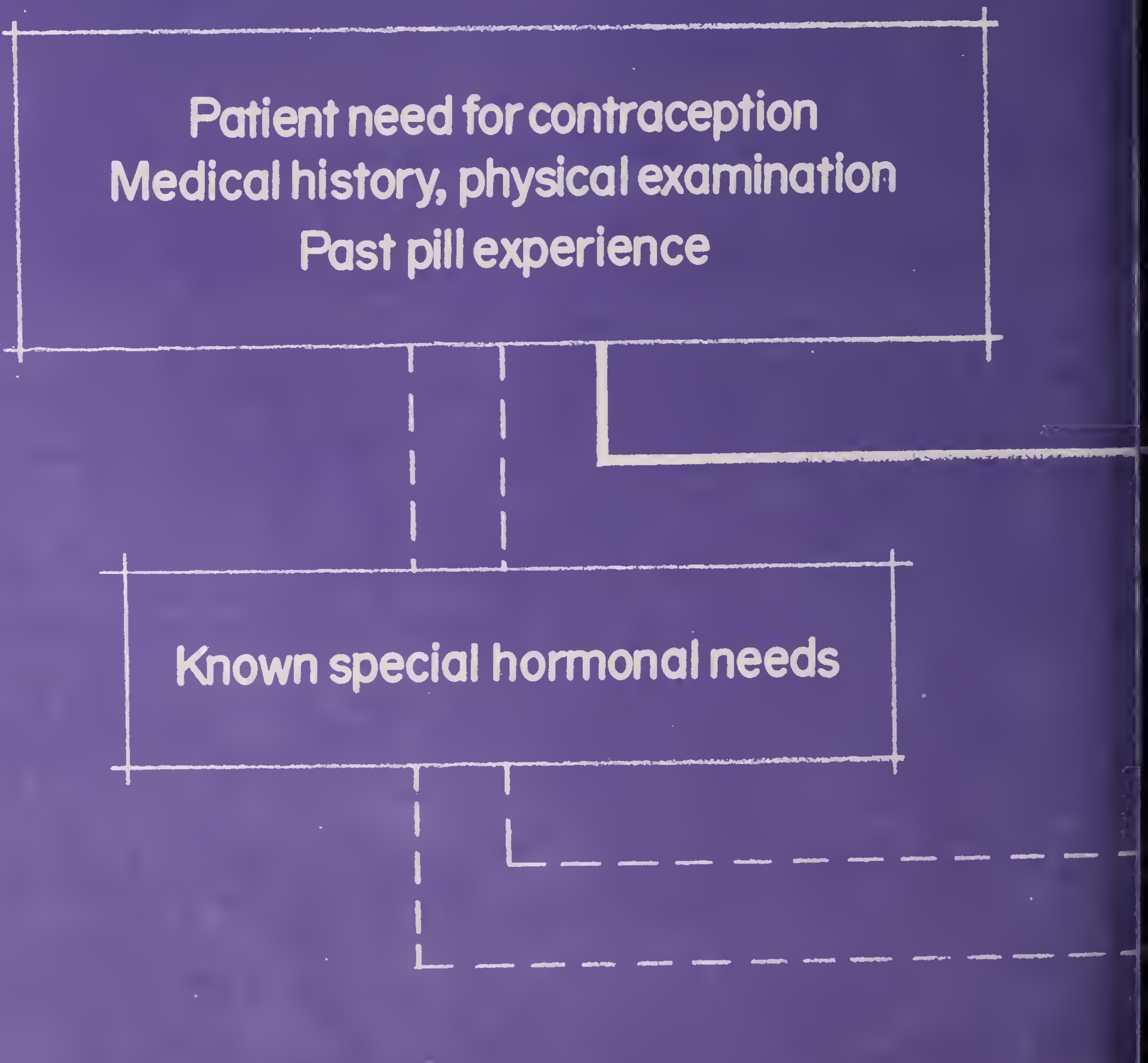

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Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in the United States. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

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sary before a significant lesion is produced and that, in the average case, 75% narrowing is present before a stroke occurs.[10] Brice *et al* state that 84% to 90% stenosis must be present to be clinically significant.[11] It would seem more realistic to consider the clinical symptoms in relation to the percent occlusion rather than the percent of narrowing necessary to produce symptoms. On the other hand, Crawford *et al* consider lesions producing 30% narrowing of the vessel lumen as significant, and their patients with such lesions are considered for operations.[12] The ulcerated plaque, which may be the source of thrombi formation and subsequent dislodgement to the distal circulation producing transient attacks or frank infarctions, may be visualized as a plaque producing insignificant narrowing.[5] This is another instance in which clinical symptoms must be kept in mind while evaluating arteriographic findings rather than adhering to a percent occlusion.

Mild intracranial disease is an indication rather than a contraindication to surgical therapy when considering ECD.[13] Relief of proximal stenosis to allow greater flow to distal areas is appreciated in aortic stenosis and aortoiliac disease. Flow characteristics are equally applicable when evaluating ECD. Poiseuille's formula, in essence, states that doubling the diameter increases the flow fourfold.[14] Additional factors, such as improved distensibility of the arterial wall and peripheral vasodilating effect of carotid sympathectomy, may account in part for the flow improvement following removal of nonstenotic lesions.[15] It is intriguing and, also, interesting to speculate the number of strokes that may be prevented in marginal cases, based on the above. On the other hand, 100% morbidity may be anticipated with frank cerebral infarction.

Surgical treatment is the only mode of therapy that may effectively increase total cerebral blood flow.[16] It is generally accepted that anticoagulation therapy should be used only if surgical therapy is contraindicated or cannot be undertaken.[17, 18] Anticoagulation as primary therapy is still used by some, but will most likely have a fate similar to that of long-term anticoagulation for coronary artery disease and peripheral vascular disease.[19]

Age alone is not a contraindication to surgery. Carotid revascularization is preventive surgery and is ideally done before significant neurologic loss has occurred. Patients with multifocal lesions and minimal neurologic deficits may often benefit from revascularization.[20]

While many prefer to utilize general anesthesia, we prefer to perform the entire procedure under local anesthesia. Local anesthesia, while not uncomfortable, allows us to monitor the patient constantly during the procedure. An extraluminal shunt is utilized if neurologic changes occur. The patients are usually discharged on the fifth postoperative day. The mortality in a series of 592 patients undergoing carotid endarterectomy was approximately 1% in those patients with transient cerebral ischemia and there were no deaths in those patients with chronic cerebral ischemia and in those patients with asymptomatic bruits.[13] In another series of 100 consecutive cases of carotid endarterectomy, there were no deaths in patients with transient cerebral ischemia and chronic stroke.[21] Once the stenotic or partially occluding lesion is removed, long-term studies indicate that the vessel remains patent for years and restenosis is the exception.[16, 22]

The stroke has assumed national prominence today as a leading killer and, also, a source of government expenditure. Basic diagnosis and elimination of nonlocalizing diagnostic tests can do much to simplify the stroke problem and prevent unnecessary deaths. Angiography should unhesitatingly be offered to the patients with the following:

A) Transient cerebral ischemia.
    1. Focal attacks characterized by occular, speech and motor disturbances.
    2. Generalized ischemia characterized by dizziness, blackout spells, headaches and other nonlocalizing symptoms.
B) Chronic cerebral ischemia. Characterized by memory loss, impaired mentation or overt motor and mental deterioration.
C) Asymptomatic bruit. Experience has shown that 90% have 50% or greater occlusion, and 65% will have transient attacks or a frank stroke within two years.[13]

This article is not intended to precipitate an all-out attack on carotid arteries. Rather, it is hoped that the tendency to utilize various so-called vasodilators and other drugs will be done only after arteriography has ruled out ECD. It also is an attempt to bring angiography and possible corrective surgery to those patients who in the near future may succumb to the morbidity and mortality of a stroke.

SUMMARY

Symptoms of transient cerebral ischemia or chronic cerebral ischemia with or without a bruit justifies cerebral angiography. The sur-

geon must consider symptoms when evaluating narrowing of the internal carotid artery as well as keeping flow characteristics in mind to properly evaluate the arteriogram. Unless contraindicated, surgical therapy is the only effective means of increasing the total cerebral blood flow.

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Reprints: *Paul E. Sauer, M.D.*
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Loxoscelism

(Continued from page 712)

Missouri University professor of entomology, Curtis Wingo.[5] It is possible for such experts to identify spiders from only fragments, which occasionally may assist in accurate diagnosis. Patients are properly more concerned with preventing the bites. Routine use of insecticides does not affect the population of Loxosceles when they are established in the home, in my opinion. Loxosceles is found in almost all older homes, especially when they are warm and moist. Air-conditioning may discourage spiders by reducing humidity. The best device is for humans not to enter suddenly into "spider country" and to carefully shake out or air materials taken from storage. The recluse spider will retreat from well-lighted, noisy, lived-in areas.

Nocturnal hunting by Loxosceles brings this gentle arachnid unintentionally into human contact, often by being trapped in bedding or bathrobes. Most bites occur at night. As of now, there is no known way to prevent such chance encounters. Several of our patients have retreated to dry, new, air-conditioned housing where brown recluse spiders haven't been found as yet. Other species of poisonous Loxosceles have been identified in Arizona and California, and bites are reported from New York. However, North American necrotic arachnidism as a medical problem is limited to the southern half of the Missouri-Ohio-Mississippi River basin. Other important studies of Loxosceles and loxoscelism are ongoing at Oklahoma State University and at the University of Arkansas Medical School. Considering recent progress, we may forecast important medical progress in the next three years, probably including immunization, a better means for recognizing severe systemic loxoscelism earlier and a better specific mode of early treatment.

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Reprints: *Philip C. Anderson, M.D.*
Division of Dermatology
University of Missouri
N 119 Medical Center
Columbia, Mo. 65201

SARAH J. RICHARDS, M.D. *and*
FERNANDO J. deCASTRO, M.D., *St. Louis*

Communication With Patients: A Parameter in Evaluating Nurse Practitioners

A Study

RECENT DEVELOPMENTS in the delivery of pediatric ambulatory health care have included utilization of specially trained nurses in primary patient care.[1, 2] Various studies concerning these pediatric nurse associates or pediatric nurse practitioners (PNP) have measured such parameters as their acceptance by the physician (M.D.) and the consumer[3] and their academic knowledge and expertise at physical assessment,[4] as well as the economic advantage in employing them.[5]

Another important parameter in health care delivery is the effectiveness of the communication between the health professional and the consumer.[6] Communication is important not only because of its psychological significance, but because it influences compliance with the prescribed course of therapy.

This report describes an exploration of the adequacy of PNP-consumer communication in a pediatric ambulatory clinic.

METHOD

Parents of children in the study filled out a questionnaire which requested demographic information as well as an account of the health professional-consumer interaction. This interaction was measured by questions covering (1) identification of the examiner; (2) satisfaction of the parent; (3) understanding of the diagnosis; (4) identification and importance of a return appointment; and (5) understanding the treatment and instructions given. This information was completed immediately following the examination.

Questionnaires were completed by the parents of 113 children representing 106 families attending an emergency room follow-up clinic that is staffed by three PNP's and a second-year pediatric resident, a woman, for the course of this study. Completed questionnaires were compared to the written medical records of the visit as to identity of the health professional, diagnosis, instructions, treatment and return appointment. Questions pertaining to diagnosis, instructions and treatment which required a write-in answer were graded on a scale of 0 (no agreement) to 3 (full agreement). All comparisons were made by the senior author (SJR).

RESULTS

Both groups of patients—the group treated by the PNPs and the group treated by the physician (M.D.)—were comparable in age of patients, maternal age and size of family. Furthermore, regularity of medical care also was comparable in both groups of patients.

Table 1 shows the results of health professional-consumer interaction. As it can be seen, M.D.s were correctly identified by 83% (39/47) of the consumers and PNPs by 74% (49/66). This difference was not statistically significant at $p > 0.05$. Seventy-five per cent (35/47) of the M.D.-treated group and 79% (52/66) of the PNP-treated group were satisfied with the care given. Ninety-four per cent (44/47, 62/66) of both groups felt that they understood what the examiner said was wrong with their child. Eighty-seven percent (41/47) of the M.D. group and 95% (63/66) of the PNP group said that all their questions were answered. These results in-

TABLE 1

COMMUNICATION: ADEQUATE SATISFACTION AND/OR KNOWLEDGE

	MD (N=47)		*PNP (N=66)*		*P*
Identity	39	83	49	74	>.05
Satisfaction					
General	75	75	52	79	>.05
Understanding	44	94	62	94	>.05
Questions answered	41	87	63	95	>.05
Return appointment	37	79	58	88	>.05
Diagnosis	35	74	55	83	>.05
Medications	37	79	55	83	>.05
Instructions	45	96	56	85	>.05

Communication with patients is a significant parameter in the care of patients and should be used in assessing the effectiveness of new health professional such as pediatric nurse practitioners. In this study, two comparable groups were examined—one by the pediatric nurse practitioners and the other by physicians. The authors conclude that pediatric nurse practitioners are able to communicate with patients on a level comparable to that of physicians. This paper was originally presented at the 12th Annual Meeting of the Ambulatory Pediatric Association. Dr. Richards is a Fellow in Community Pediatrics and Dr. deCastro is Associate Professor of Pediatrics & Community Medicine, St. Louis University School of Medicine.

dicate no significant difference at $p > 0.05$ in the satisfaction expressed by the two groups.

Seventy-nine per cent (37/47) of the physician group and 88% (58/66) of the nurse practitioner group correctly identified the return appointment. (Statistically insignificant at $p > 0.05$, 72% of both groups felt that the return appointment was important.)

On a scale of 0-3, 74% (35/47) of the physician group and 83% (55/66) of the nurse practitioner group showed a good understanding of the diagnosis (2-3 on the scale). Similar results were found in regard to the medications and instructions given. Seventy-nine per cent (37/47) of the physician group and 83% (55/66) of the nurse practitioner group comprehended the type of medications prescribed and how to take them. Ninety-six per cent (45/47) of the physician group and 85% (56/66) of the nurse practitioner group indicated that they understood instructions given. The above results all show no significant difference at $p > 0.05$.

Comments

Numerous recent studies have measured not only the knowledge and efficiency of pediatric nurse practitioners[3, 4] but, also, the economic advantages of employing them.[5] However, communication between these new health professionals and the patient has not been properly assessed.

Communication between health professionals and the consumer is a major factor in well-baby care and general health supervision of children.[6] Communication is one of the primary proposed roles for pediatric nurse practitioners. The present study gives evidence that pediatric nurse practitioners are able to communicate with patients on a comparable level with physicians. Thus, they can be effective assistants to the busy physician.

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Reprint: Fernando J. deCastro, M.D.
Cardinal Glennon Memorial Hospital
for Children
1465 S. Grand Blvd.
St. Louis, Mo. 63104

The National Center for Disease Control says cases of syphilis, which have risen for four consecutive years, may be leveling off. The CDC said 2,076 cases of primary and secondary syphilis were reported during June, or 0.3% fewer than in the same month a year ago. In the first three months of 1973, syphilis cases increased by 4.7%, but in the April-June period, the rise was only 0.5%.

DAVID S. MEYERS, M.D. *and*
WALLACE ROGERS, M.D., *Columbia*

Papillary Muscle Rupture Due to External Cardiac Massage

Case Report

The authors report a case of right ventricular papillary muscle rupture. According to the literature, the most common cause of rupture in 11 reported cases was found to be trauma (seven cases). This case represents iatrogenic, traumatic rupture of a right ventricular papillary muscle during external cardiac massage. No evidence of recent myocardial infarction or endocarditis was found. The pathologic anatomy of the patient's heart is suggested as a contributing factor to the rupture. Dr. Meyers is a Resident and Dr. Rogers is Assistant Professor, Department of Pathology, University of Missouri-Columbia School of Medicine.

External cardiac massage is a widely used procedure in the therapy of cardiac arrest. However, a variety of complications secondary to cardiac massage have been reported.[1-3] Our review of the literature failed to reveal any reports of papillary muscle rupture due to cardiac massage. The following case report describes rupture of a right ventricular papillary muscle due to cardiac massage.

Case Report

An 84-year-old man was admitted to the University of Missouri-Columbia Medical Center on Aug. 11, 1972 with a one-week history of confusion progressing to obtundation, shortness of breath and a cough productive of yellow sputum. The family related that the patient had suffered a "heart attack" in 1947. The patient took a daily "water pill" because of swelling of his feet.

Initial physical examination revealed a blood pressure of 96/72, labored respirations of 40/minute and an irregular pulse rate of approximately 120/minute. The patient appeared dehydrated, but the estimated central venous pressure was 16 cm of water with marked jugular venous distention. There was positive hepatojugular reflux. Scattered rhonchi were present throughout the lungs. The heart sounds were distant with no murmurs or gallops being heard. The liver was palpated to 8 cm below the right costal margin. The patient was semicomatose, but no localizing neurologic signs were present.

The white blood cell count was 17,000/cu mm with 97% neutrophils. The hemoglobin level was 16.7 gm/100 ml. The serum chloride value was 86 mEq/liter; serum potassium, 4.4 mEq/liter; and serum sodium, 127 mEq/liter. The blood urea nitrogen (BUN) was 84 mg/100 ml. Arterial blood gases with the patient breathing room air showed a pH of 7.5, a PO_2 of 21 and a PCO_2 of 32. PA and lateral chest x-ray showed cardiomegaly, pleural effusions and discoid atelectasis on the right. Pericardial calcification and effusion were thought to be present as well. An electrocardiogram was interpreted as showing atrial fibrillation, low voltage in limb leads, premature ventricular contractions and a probable, old, inferior myocardial infarction.

The above laboratory studies were obtained immediately after admission, and the patient was taken to the Radiology Department for the x-rays mentioned above. Shortly after the completion of the films and while being moved off the radiology examination table, he experienced a cardiorespiratory arrest. Resuscitation was initiated and was continued for approximately 45 minutes until spontaneous pulse and respiratory efforts were obtained. External cardiac massage was carried out during the resuscitation as well as the placement of an endotracheal tube for assisted ventilation. Isoproterenol was given intravenously for blood pressure maintenance. While being transported from the Radiology Department to the Medical Intensive Care Unit, he suffered a second cardiopulmonary arrest. An attempt was made to tap his pericardial space because of the possibility of pericardial effusion with cardiac tamponade. No fluid was obtained. The patient's pupils were dilated and fixed at that point, and no further resuscitative attempts were deemed warranted. He was pronounced dead four and one-half hours after admission.

Autopsy Findings

About 300 cc of clear, straw-colored fluid was present in each pleural cavity. Three recent rib fractures (the third rib bilaterally and the fourth rib on the right) with local pleural hemorrhage were present. Histologic examination of the lungs revealed multiple, recent bone marrow emboli.

The heart was massively enlarged and weighed 1,000 gm. There was biventricular hypertrophy and dilatation. A 6 cm x 10 cm calcified aneurysm was present in the anterolateral wall of the left ventricle (Fig. 1). The left anterior descending coronary artery was occluded by a well-organized and recanalized thrombus. The left circumflex and right coronary arteries were approximately 80% narrowed by atherosclerotic plaques. No recent thrombi were present.

When the right atrium was opened, the body of a papillary muscle could be seen in the right ventricle in the orifice of the tricuspid valve. The chorda of the muscle was twisted around the chordae of the posterior valve leaflet. Upon opening the right ventricle, the ruptured papillary muscle was found to have arisen from the posteroseptal wall (Fig. 2). The tricuspid valve circumference was 15 cm. The left and right ventricular walls averaged 17 mm and 8 mm in thickness, respectively.

Sections taken from the ventricular wall at the point of rupture, from representative portions of the remainder of the heart and from the avulsed papillary muscle were stained with H&E, PTAH and Masson's Trichrome for histologic study. Histologically, the surfaces of rupture were coated with a recently formed fibrin cap. Multiple sections from the right and left ventricles failed to reveal any evidence of recent myocardial infarction. Also, no evidence of infarction was present on step sections of the ruptured papillary muscle. No foci of endocarditis were present.

Discussion

Papillary muscle rupture is becoming more frequently recognized in the recent literature with more than 125 cases now having been reported.[4-6] The great majority of these cases have occurred in the left ventricle and were generally caused by myocardial infarction. Right ventricular papillary muscle rupture is distinctly more unusual. We reviewed the literature and found 11 cases of isolated right ventricular papillary muscle rupture.[7-15] Seven of these cases were due to trauma.[7, 8, 10, 11, 13-15] The victims of traumatic rupture tended to be young adults, and the trauma was usually of a severe nature such as a head-on automobile collision. Three cases have been reported due to endocarditis.[9] Only one report of a case due to myocardial infarct has been published.[12] Our case represents the 12th case of right ventricular papillary muscle rupture to be reported. However, to our knowledge, it is the first case in which rupture following external cardiac massage has been identified in either of the ventricles. This case would qualify as a traumatic rupture which is the most common cause of RV papillary muscle rupture (seven of the 11 previously reported cases).

A spectrum of complications due to external cardiac massage has been described.[1-3, 16] Injuries include rib fracture, hepatic laceration, ventricular rupture, bone marrow emboli and others.

(Continued on page 729)

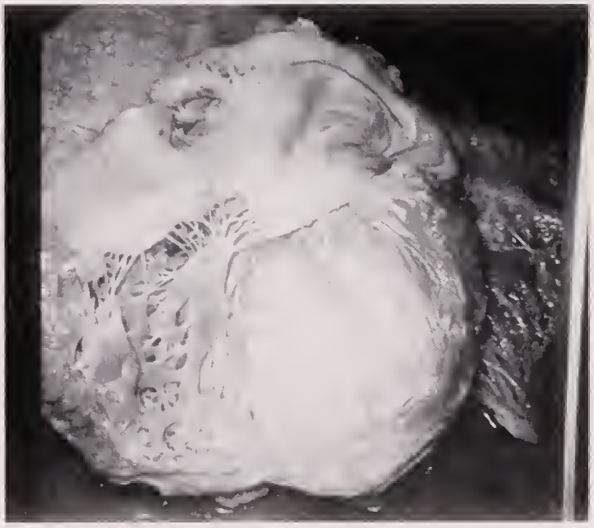

Fig. 1 Left ventricle, opened posteriorly, showing the calcified aneurysm.

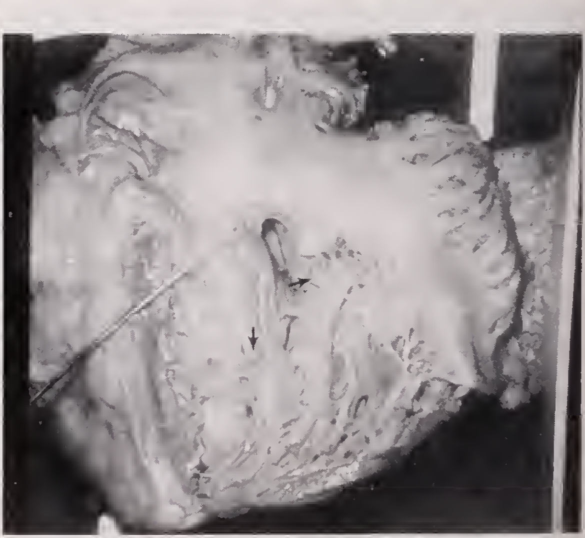

Fig. 2 Right ventricle, showing the ruptured papillary muscle and its point of origin (arrows). Also shown are focal zones of myocardial fibrosis.

RICHARD J. SAMAHA, M.D. *and*
NASROLLAH HAKAMI, M.D., *Columbia*

Treatment of Acute Leukemia: Important Role of the Central Nervous System

Case Reports

Recent clinical studies involving the sustained administration of multiple antileukemic agents have demonstrated an increasing leukemia-free survival duration in children and young adults.[1–3] Investigators have even stated that prolonged disease-free survival may lead to a possible cure in a significant number of patients.[4, 5] Upwards of 90% of young patients with acute lymphocytic leukemia will achieve an initial hematological remission with combinations of agents such as vincristine and prednisone. However, the problem of the best way to maintain the complete remission remains.[6] It is now clear that many patients will remain in a hematological remission only to relapse or have persistent leukemic infiltrates in extramedullary sites.[7–9] With regard to involvement of extramedullary organs by disease, relapse in the central nervous system (CNS) has become the most important in children.[10] Clinical and laboratory studies indicate that leukemic cells may migrate from the blood into the CNS and vice versa, but that antileukemic agents do not cross from the blood into the CNS to any significant degree.[11–14]

From the above data, it would appear that treatment of childhood leukemia must contain therapy directed at the CNS as well as the bone marrow. Leukemic involvement of the CNS is not always a delayed manifestation and may be present at the initial diagnosis in certain patients. This paper is divided arbitrarily into discussions of early and delayed CNS complications of leukemia, but it will become obvious that these complications can occur at any time in the patient's course. Case studies are used to illustrate the diagnosis and therapy of leukemic involvement of the CNS with particular attention being paid to current therapy directed at the prevention of CNS relapse in children with acute lymphocytic leukemia.

CNS Leukemia—Early

In an analysis of 334 cases of leukemia in 1935, Schwab and Weiss[15] called attention to the fact that 20% of the patients had neurological manifestations excluding retinal lesions, such as hemorrhage. The most frequent clinical sign was cranial nerve palsies. In about three fourths of these patients, the spinal fluid revealed an increased blood cell count, increased protein or increased pressure. In a later paper, Wells and Silver[16] emphasized intracranial hemorrhage as the most frequent neurological complication in their cases of children and adults with acute leukemia. The clinical symptoms observed were seizure, fainting, vomiting, paresis, headache and change in the mental state. Subsequently, Shaw *et al*[17] called attention to the syndrome of meningeal leukemia caused by leukemic infiltration of the arachnoid and with signs and symptoms resulting from increased intracranial pressure. This syndrome occurs most often in the child under therapy and shall be discussed in the following section on delayed involvement of the CNS by leukemia.

In 1959, Fritz *et al*[18] documented the complication of intracranial hemorrhage occurring in patients with acute leukemia who have rapidly rising numbers of leukemic cells in the peripheral blood. Of 100 consecutive patients admitted to the National Cancer Institute in the years 1954-1957, 81 died from a variety of causes. Of these 81, 13 had peripheral white blood cell counts greater than 300,000/cu mm. Importantly, nine (69%) of the 13 patients with a count greater than 300,000/cu mm died of an intracranial hemorrhage within a few days of the observation of a high white cell count. Significantly, only nine (13%) of 68 patients with a peripheral cell count less than 300,000/cu mm died of a hemorrhage in the CNS. Most of the patients with the higher white cell counts had greater than 90% circulating leukemic cells. It is of interest that these patients had significantly higher platelet counts than those patients with peripheral cell counts less than 300,000/cu mm.

The authors present case studies to illustrate the diagnosis and therapy of leukemic involvement of the central nervous system. Particular attention is paid to current therapy directed at the prevention of central nervous system relaps in children with acute lymphocytic leukemia. Dr. Samaha is Assistant Professor of Medicine and Dr. Hakami is Associate Professor of Pediatrics, Division of Hematology-Oncology, University of Missouri Medical Center.

There was no correlation as to type of leukemia, age or sex, but these authors remarked that patients with acute myelogenous leukemia tended to have a more rapid rise in peripheral white cell counts and bled earlier than patients with acute lymphocytic leukemia.

In a subsequent review of a larger group of patients from the National Cancer Institute, Moore *et al*[19] analyzed the relationship of peripheral white cell count to the type of fatal intracranial hemorrhage as outlined in Table 1. Again, the patients with the highest white cell counts had significantly higher platelet counts than those patients with the lowest peripheral cell counts. The patients with the lowest white blood cell counts had uniformly severe thrombocytopenia and died primarily of subarachnoid hemorrhage which, the authors remarked, was an expected complication of prolonged thrombocytopenia. As the white cell count increased above 100,000/cu mm, these patients manifested a 12-fold increase in the number of fatal intracerebral hemorrhage.

Indeed, Freireich *et al*[20] described two distinctive types of histological lesions occurring in those patients with high white cell counts and intracerebral hemorrhage. One lesion was the leukemic nodule consisting of masses of leukemic cells invariably surrounded by fresh hemorrhage; and the second microscopic lesion, termed leukostasis, consisted of dilated, thin-walled intracerebral vessels engorged with leukemic cells. The following sequence of events was suggested: the leukemic cells are locally collected in intracerebral vessels leading to dilatation and eventual destruction of the vessel wall with subsequent nodule formation and bleeding. Phair *et al*[21] suggested that the high number of circulating leukemic cells increased the blood viscosity which, in the presence of hypoxia, cell breakdown products and thrombocytopenia, led to the vascular dilatation and rupture. Most recently, McKee and Collins[22] reported the frequent occurrence of leukostasis in acute leukemia patients who died with white cell counts over 200,000/cu mm. It seems likely that leukostasis in the presence of other factors which cause weakening of the vascular wall results in vessel rupture and hemorrhage.

TABLE 1

PERIPHERAL WBC COUNT AND FATAL CNS HEMORRHAGE[*]

WBC (cu mm)	*Patients*	*Intracerebral Hemorrhage (Patients)*	*Subarachnoid Hemorrhage (Patients)*
Less than 50,000	89	3 (3.4%)	9 (10.1%)
50-100,000	6	2 (33.3%)	0
100-200,000	8	2 (25.0%)	0
200-300,000	5	2 (40.0%)	0
More than 300,000	7	5 (71.4%)	0

[*] Data from Moore *et al.*

Whatever the mechanism, it is clear that patients with acute leukemia and high numbers of circulating leukemic cells are at significant risk of intracranial hemorrhage. The following case studies will serve to illustrate the approach to these patients.

Case Reports

Case # 1. The patient was a 29-year-old white man with a three-week history of a persistent upper respiratory tract infection. He developed ecchymoses and bleeding gums five days prior to admission to the University of Missouri Medical Center.

On admission, he was febrile and in distress, complaining of an increasingly severe headache. On physican examination, he had hemorrhages in the fundi, diffuse lymphadenopathy and an enlarged liver and spleen. His neurological examination was within normal limits.

Laboratory data revealed a white blood cell count of 270,000/cu mm with 93% myeloblasts, a hemoglobin level of 14.3 gm/100 ml; a hematocrit reading, 42%; and a platelet count of 46,000/cu mm. His serum chemical determinations and routine clotting studies were normal. His bone marrow was diffusely replaced by myeloblasts.

During his first three hours after admission, he complained of an intense headache, but he revealed no focal neurological signs. A nontraumatic lumbar puncture showed an increased pressure of 330 mm. Spinal fluid studies revealed normal protein and glucose and a normal white cell count of 2 polys/cu mm. Initially, he received allopurinol, 4 gm of oral hydroxyurea to reduce the white cell count and platelet infusions to improve the thrombocytopenia.

Because of the severity of the headache, plans were made to start cranial irradiation. About six hours after admission, however, the patient became obtundant with signs of a cerebrovascular hemorrhage on the right side. About eight hours after admission, his white cell count had fallen to 154,000/cu mm and his platelet count increased to 75,000/cu mm as a result of initial transfusion therapy. During the following 24 hours, he developed signs of a massive right cerebral hemorrhage and died despite intensive supportive therapy.

At autopsy, the brain contained a large right intracerebral hemorrhage and scattered foci of leukemic cell masses surrounded by hemorrhage.

Case # 2. An 18-year-old white woman was referred to the University of Missouri Medical Center with a four-week history of easy bruising and malaise. Her other symptoms consisted of occasional nausea and intermittent headaches. On physical examination, she had a temperature of 100 F and a pulse rate of 128/min. Her positive findings consisted of small hemorrhages in the fundi, cervical adenopathy and an enlarged spleen. The neurological examination was entirely negative.

Laboratory data revealed a peripheral white blood cell count of 472,000/cu mm with 82% blast cells. The hemoglobin value was 5.5 gm/100 ml, hematocrit reading was 17% and platelet count was 80,000/cu mm. Her serum chemistry values were unremarkable, including a uric acid value of 6.8 mg/100 ml. The bone marrow was diffusely infiltrated with abnormal cells and felt to be consistent with acute lymphocytic leukemia.

She was started on a regimen of high doses of allopurinol to prevent uric acid nephropathy and was given 1 gm of cyclophosphamide intravenously to rapidly reduce the number of circulating leukemic cells. Two days after cyclophosphamide administration, her white blood cell count had fallen to 154,000/cu mm and the platelet count was 42,000/cu mm. She was started on induction therapy with weekly intravenous doses of vincristine and daily doses of prednisone. During the first week, she also had received transfusions of packed red blood cells and platelets. After four courses of vincristine and prednisone therapy, she entered a complete clinical remission.

Following successful induction therapy, the patient received maintenance therapy consisting of daily oral administration of 6-mercaptopurine, weekly oral dose of methotrexate and monthly vincristine and prednisone courses. At the end of the fourth month of maintenance therapy, the patient received "prophylactic" intrathecal methotrexate administration. She had no neurological signs or symptoms and the spinal fluid examination was negative. At present, the patient is still in a complete clinical remission 18 months after induction therapy and has just received a second course of "prophylactic" CNS therapy consisting of irradiation to the skull.

COMMENT

Both of the above patients had strikingly high peripheral leukemic cell counts which placed them at significant risk of intracerebral hemorrhage. Patient # 1, with acute myelocytic leukemia (AML), had a much more rapid progression of symptoms before admission to the hospital than Patient # 2 with acute lymphocytic leukemia (ALL). The rapid progression of disease in patients with AML as opposed to ALL was commented on earlier. The CNS involvement may be insidious as demonstrated in Patient # 1 with severe headaches but no initial neurological findings except for a raised pressure on lumbar puncture. Patient # 2 had intermittent headaches with negative clinical findings, but a lumbar puncture was not done. In both cases, therapy was directed at rapidly reducing the white cell count and raising the platelet count. At the time Patient # 1 developed signs of a cerebrovascular bleed, his clotting studies were normal and his platelet count was 75,000/cu mm, which is above the usual level for bleeding in patients with acute leukemia.[23] These latter findings are consistent with the proposed central role of the increased number of circulating leukemic cells in causing intracerebral hemorrhage. Patient # 2 had an uneventful course following aggressive therapy and went on to enter a complete clinical remission. The important role of "prophylactic" CNS therapy as illustrated in Case # 2 will be discussed in more detail in the next section.

Obviously, we cannot tell if acute reduction of the peripheral leukemic cell masses by drugs prevented intracerebral hemorrhage in Patient # 2 and we are not aware of any prospective studies that speak directly to this issue. However, from the available clinical data, there is no question that patients with acute leukemia and elevated peripheral cell counts are at significant risk of intracerebral hemorrhage. Early referral of patients with acute leukemia to institutions that are prepared to direct therapy not only at the peripheral blood and marrow but, also, at the CNS if necessary, is most desirable.

CNS LEUKEMIA—DELAYED

The complication of intracranial hemorrhage as a result of high levels of circulating leukemic cells can occur at any time in the patient's course. It is more likely to occur at the time of initial diagnosis since the patient under therapy is followed with regular peripheral cell counts and, therefore, a rise in circulating leukemic cells is more apt to be detected early.

As effective drug therapy for acute leukemia became available, physicians began to recognize a clinical syndrome resulting from leukemic infiltration of the meninges.[17] Examination of the CNS in these patients reveals leukemic infiltration of the arachnoid with perivascular extension into deeper structures but without evidence of significant hemorrhage.[19, 24] The syndrome of meningeal leukemia is clinically recognized by nausea and vomiting, headache, lethargy, irritability, convulsions, papilledema and cranial nerve palsies. In young children, widening of skull suture lines may be present. Although these signs and symptoms alert the physician to the possible presence of CNS leukemia, some children will have no obvious clinical manifestations.[25] The most reliable spinal fluid findings are an increased cell count and pressure in the absence of positive bacteriological cultures and gross blood.[25] In the clinicopathological studies of Nies *et al*,[26] it was shown that routine examination of the spinal fluid is not sufficiently sensitive in making the diagnosis of meningeal leukemia. Later, Skeel *et al*[27] described a rapid technique for detecting small numbers of abnormal cells in spinal fluid. They diagnosed meningeal leukemia if the fluid contained 5 or more cells per cu mm and if abnormal cells could be identified. All of the above authors have commented that cytological examination of spinal fluid cells is difficult and is best done by experienced observers.

With subsequent studies, it became obvious that the increasing incidence of delayed central nervous system leukemia in children and adults was related to longer survival and better diagnostic techniques.[10, 28, 29] Of importance, the majority of children who manifested meningeal leukemia were in a hematological remission at the time CNS disease was detected.[10, 28] Further, in one study in which 47 children had routine spinal fluid examinations at the time of diagnosis irrespective of clinical or laboratory findings, 8.5% (four patients) had CNS infiltration by spinal fluid cytology but no clinical signs or symptoms.[30] For each month of survival, the chance of a child developing meningeal leukemia increases at a steady rate of between 2% to 3% per month.[10, 28] Although the issue is not definitely settled, it would appear that the development of meningeal leukemia adversely effects the duration of survival.[10, 17, 28] This latter question should be resolved in the current ongoing studies which, at this time, argue strongly for prophylactic antileukemic therapy directed at the CNS.[4]

We already have remarked that leukemic cells can probably traverse in and out of the CNS while antileukemic drugs do not significantly cross the blood-brain barrier. Earlier studies proved that the instillation of intrathecal methotrexate was a safe and reliable means of treating meningeal leukemia.[31, 32] A few reports of serious adverse reactions to the drug have been traced to preservatives, such as methylhydroxybenzoate and benzyl alcohol, used in the diluent solution.[33] Currently, we dilute the drug in sterile distilled water, which has proved to be a safe diluent. Intrathecal Arabinosyl cytosine has proven effective and has been used in recurrent meningeal leukemia previously treated with intrathecal methotrexate and cranial irradiation.[34] Parenteral and oral administration of dexamethasone has been useful in relieving the acute symptoms of meningeal leukemia, presumably due to reduction of cerebral edema, but it does not eradicate leukemic cells in the cerebrospinal fluid.[35] Lumbar puncture with removal of spinal fluid also may improve symptoms, but instillation of antileukemic drugs is necessary for consistent and persistent relief.[36] Irradiation to the cerebrospinal axis is effective therapy for meningeal leukemia and the combination of irradiation and intrathecal methotrexate may increase the response rate.[37, 38] Of interest, patients who develop systemic resistance of their leukemia to orally administered methotrexate may still respond to intrathecal methotrexate therapy of their CNS leukemia.[36] Sullivan *et al*[37] have presented data which suggest that, after initial therapy of meningeal leukemia, continued regular instillation of intrathecal methotrexate prolongs the duration of the CNS remission.

The introduction of "prophylactic" therapy directed at the CNS was a result of the observation that a high percentage of children were developing meningeal leukemia while in clinical remission and the proposition that leukemic cells may "hide out" in the CNS safe from parenteral therapy only to later reinfiltrate the marrow causing a clinical relapse. Prevention of CNS leukemia also implies control of the visceral and marrow disease since patients who do relapse in the blood are more likely to relapse in the CNS.[37] With the onset of prolonged complete clinical remissions as a result of sustained multiple drug therapy, the issue of CNS relapse became increasingly important, especially since the possibility existed that a number of children might be cured of their disease.[3] The evidence is now clear in children with acute lymphocytic leukemia that treatment of the CNS by irradiation or intrathecal methotrexate or both during the early initial remission period will delay or prevent the occurrence of meningeal leukemia.[39-42] The recent clinical data of Aur *et al*[43] speaks directly to the issue of "prophylactic" CNS therapy and their results are summarized below. Of 110 patients entered into the study, 104 (94%) achieved an initial hematological remission and went on to receive maintenance therapy. After four weeks of complete remission, 94 patients were eligible for randomization to receive 2,400 rads of cobalt-60 craniospinal irradiation and continued therapy or no irradiation and continued therapy. Of the ten who were not randomized, seven had earlier relapsed with CNS leukemia. These investigators reported that "CNS leukemia terminated complete remission in two of 45 children (4.4%) who received 'prophylactic' irradiation and in 27 of 49 (55%) who did not receive irradiation." Hematologic relapse preceded CNS relapse in four of 49 not irradiated and ended remission in seven of 45 who were irradiated. Therefore, 34 of 45 who received "prophylactic" irradiation have remained in complete remission while only 16 of 49 of the non-CNS-irradiated group were still in a complete remission (Table 2).

These authors also found that once CNS leukemia became manifest, the 2,400 rads craniospinal irradiation was not sufficient to prevent further recurrences. The long-term results of this study will be most important and the data thus far suggest that early craniospinal irradiation of children in complete remission from acute lymphocytic leukemia helps to prolong the duration of survival free of disease.[4]

TABLE 2

"PROPHYLACTIC" CNS THERAPY IN ACUTE LEUKEMIA*

	Craniospinal Irradiation	*No Irradiation*
Number of patients	45	49
CNS Leukemia end remission	2	27
Hematologic relapse end remission	7	4
Remain in complete remission	34	16
Median duration of survival up to July, 1972	17 + months	19 + months

* Data from Aur *et al.*

The following selected cases serve to illustrate the recognition and management of meningeal involvement in children with acute lymphocytic leukemia.

CASE REPORTS

Case # 3. A patient was referred to the University of Missouri Medical Center at the age of 7½ years with an illness characterized by intermittent fever, progressive pallor and easy bruising. She had peripheral blood pancytopenia; examination of the marrow aspirate showed uniform infiltration with lymphoblasts. Following four weeks of chemotherapy with vincristine and prednisone, all of her clinical and hematological abnormalities returned to normal. Her remission has been maintained with biweekly oral doses of methotrexate combined with monthly reinforcement therapy with vincristine and one week of oral doses of prednisone. Six months after therapy was begun, she developed headaches, vomiting and a stiff neck. On examination, she had papilledema. Her spinal fluid examination showed 3,200 cu mm abnormal cells and normal protein and sugar. Peripheral blood and bone marrow examinations were within normal limits. With intrathecal injections of methotrexate at a dose of 12 mg per square meter given every second day, all of her symptoms subsided, and her spinal fluid became normal after six doses. In an attempt to prevent further recurrences of meningeal leukemia, she is now receiving monthly intrathecal injections of methotrexate.

Case # 4. This patient had the diagnosis of acute lymphocytic leukemia made at the age of three years. A successful clinical remission was induced with a combination of vincristine and prednisone administered over a period of four weeks. The patient was then maintained in remission with daily 6-mercaptopurine doses. Fifteen months later, he developed relapse of his leukemia. At this time, he was found to have papilledema but no symptoms referable to the CNS. His spinal fluid contained abnormal mononuclear cells in large number, elevated protein and normal sugar. A second remission was achieved with the administration of vincristine and prednisone. Papilledema and spinal fluid changes returned to normal after four intrathecal injections of methotrexate at a dose of 12 mg per square meter. On a regimen of monthly intrathecal injections of methotrexate, he remained asymptomatic for 16 months. However, two months after discontinuation of this regimen, he had another episode of meningeal leukemia which was successfully controlled with four intrathecal injections of methotrexate. With resumption of the monthly prophylactic regimen, he has remained asymptomatic.

Case # 5. Thirteen months after the diagnosis of acute lymphocytic leukemia and while in hematological remission with a maintenance regimen of daily oral doses of 6-mercaptopurine, this 3-year-old boy developed vomiting but had no other evidence of increased intracranial pressure. His spinal fluid contained 960 abnormal mononuclear cells per cubic millimeter, but protein and sugar content were normal. With four intrathecal injections of methotrexate over a period of a week, his symptoms subsided and spinal fluid abnormalities became normal. With monthly intrathecal injections of methotrexate for six months, he remained asymptomatic, but two months after discontinuation of this regimen, he developed another episode of meningeal leukemia manifested by headache, vomiting, papilledema and large numbers of leukemic cells in the spinal fluid. This episode was treated again with four intrathecal injections of methotrexate. With resumption of the monthly regimen, he remained asymptomatic.

COMMENT

When all signs and symptoms of increased intracranial pressure are present, as in Case # 3, meningeal leukemia is easily recognized. Not too infrequently, however, meningeal leukemia in its early stage may be associated with minimal signs and symptoms as was seen in Cases # 4 and # 5. Meningeal involvement should be suspected, and examination of CSF fluid must be made in all patients with acute leukemia with minimal evidence for increased intracranial pressure. The identification of small numbers of the abnormal mononuclear cells in spinal fluid can be made by centrifugation of the fluids, resuspension of the cell pellet in plasma and Wright's staining of the smear made from the pellet. Alternatively, spinal fluid can be passed through Millipore filters and the retained cells are then stained for morphological examination.

The intrathecal injection of methotrexate is effective in rapid control of meningeal involvement of acute leukemia. It is administered at a dose of 12 mg per square meter of body surface at two-to-three day intervals, until there are less than 5 cells per cu mm in the CSF fluid. Failure of response to intrathecal methotrexate is thought to be most likely due to involvement of deeper structures of the brain which are amenable only to radiotherapy. As it was cited earlier, continuation of intrathecal administration of methotrexate every four to six weeks after the first episodes is likely to prevent further recurrences. In Cases # 4 and # 5, cessation of maintenance therapy was soon followed by recurrence of meningeal leukemia.

At the present time, optimum treatment of acute lymphocytic leukemia of childhood involves the sustained use of multiple agent chemotherapy combined with "prophylactic" treatment of the central nervous system early in remission.[44, 45] This long-term and intensive management can be carried out effectively through collaboration of all physicians in the community and centers dealing with malignancies of childhood.

The University of Missouri is a member of a multi-institutional, international cooperative group by which systematic studies directed at chemotherapeutic control of acute leukemia are being conducted. The results of these studies and those of other cooperative groups will be of great interest toward the goal of cure for acute lymphocytic leukemia of childhood.

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Reprints: *Richard J. Samaha, M.D.*
Division of Hematology-Oncology
University of Missouri
228 Medical Science Bldg.
Columbia, Mo. 65201

Papillary Muscle Rupture

(Continued from page 722)

Our case represents several of the more common findings (bone marrow emboli and rib fractures) as well as papillary muscle rupture. The abnormal configuration of the heart due to the large calcified aneurysm would potentiate the mechanical stresses of cardiac massage and, perhaps, contribute to the rupture. As mentioned above, the right ventricle was dilated and the tricuspid valve circumference was 15 cm. The compressive force of external massage at the moment of maximum right ventricular filling might rupture an already elongated papillary muscle.

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Reprints: *David S. Meyers, M.D.*
Department of Pathology
University of Missouri Medical Center
Columbia, Missouri 65201

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Dear Doctor:

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The above vital words state the purpose and goal of the Missouri State Medical Foundation, which has provided more than 1,010 loans to Missouri medical students since 1960.

The money for these loans has been made available through the generosity and dedication of the practicing physicians of Missouri.

Despite this past and present generosity, however, additional money is still needed to provide all the loans we would like to make to assist students.

You, as a practicing physician in Missouri, can make more funds available by contributing to the Foundation now. Such donations are tax deductible. This is an excellent time to make your 1973 gift since we are near the close of the tax year.

The need for more physicians is still great. We of the Missouri State Medical Association can and must help to fill this need by providing loans to medical students who are residents of our state. I am certain that you would not want the Foundation to turn away any deserving student because of our lack of funds.

Please send your check now. Make it payable to the Missouri State Medical Foundation and mail it to Box 1028, Jefferson City 65101. Today is not too soon.

Sincerely yours,

Byron M. Stuart, M.D.

President

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President's Message

Why the High Cost of Medical Care?

There has been considerable discussion and criticism of the medical profession over the high cost of medical care. Actually, much of the spiraling costs are due to increase in hospital costs, which have jumped more than 50% since 1960. Physicians' fees account for only 16% of the total medical care dollar.

There certainly is reason for concern. But as Caspar Weinberger, Secretary of HEW, says, "The real culprit is the federal government," which—through its policies of Medicare and Medicaid—has had a major role in causing health care costs to spiral. First, there was a sharp increase in utilization by patients; then, to comply with federal regulations, many hospitals had to increase the number of employees and equipment. There was an increase in minimum wages and an increase in the payroll of hospital personnel (which had been far below par).

E. A. Stricker, M.D.

As medical services have become more sophisticated, they are, naturally, more expensive. With the introduction of recovery rooms, intensive care units, renal dialysis, open heart surgery and many other expensive services, the costs have escalated.

These services save lives and improve health. People have faith in them, hence the wide utilization of hospitals. It is the success of medicine, rather than its failure, that is responsible for the increase in demand and, therefore, the increase in cost.

We physicians have no control of the hospital payroll or cost of food and supplies. But we do have some control of who utilizes the hospital, how long he stays and what services he receives. This is one way that we may slow the spiraling medical care costs and relieve the anxiety of some of the lawmakers, insurance companies and the man who pays the bill.

It is still—or should be—a matter of individual patient need, as determined by the physician's judgment of good and necessary medical care.

"Without your help

. . . I simply would not have made it through medical school!"

(The following letter was received on Oct. 1, 1971 from a physician who, as a student, received financial assistance from the Missouri State Medical Association members who have contributed to the Missouri State Medical Foundation. It is printed with his permission.)

Dear Doctor:

"Thank you very much for your thoughtful letter concerning receipt of my final payment on my medical student loan.

"I can well remember the feeling of destitution associated with being a reasonably good student but lacking funds with which to enroll for the next semester in medical school. Having always been, perhaps, more than adequately endowed with pride, it was a lesson in discipline and humility to go seeking financial assistance. However, the effort brought me in contact with some very nice people who really do a lot to keep one's faith in human nature alive.

"I sincerely appreciate the efforts which you and others put into the Missouri State Medical Foundation and all other student loan funds. You should feel a quiet heroism for the assistance you lend to needy students . . . without your help, I simply would not have made it through medical school."

The Missouri State Medical Foundation—MSMF—was created by the Missouri State Medical Association for the express purpose of giving financial assistance to deserving young Missourians who will be tomorrow's doctors.

Send a Check Today to MSMF!

MISSOURI STATE MEDICAL FOUNDATION

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Woman's Auxiliary

50th Anniversary

Mention the season "Fall" to a member of the MSMA Woman's Auxiliary and she immediately looks forward to our Annual Fall Conference which will be held this year at the Plaza Inn in Kansas City on October 24-25. And, it is with special sincerity, Doctor, that I hope you will not only mention the Fall Conference, but will urge your wife to attend and participate.

Mrs. Charles R. Willman
President

The Fall Conference provides two interesting days of important information, exchange of ideas and fun. In addition to all Auxiliary members, physicians' wives who are not members at this time are invited to attend. The theme this year will be "Ideas to Improve Quality of Life."

On October 24, "Food for the Good Life" will be the subject to be discussed by a panel which will be moderated by Mrs. Gretchen Kraus, National Nutrition Chairman for the Woman's Auxiliary to the AMA. Other members of the panel will be Cindy Sisk, Nutrition Director, Dairy Council of Greater Kansas City; Beverly Crabtree, Ph.D., Associate Dean, School of Home Economics with Extension, University of Missouri; and Charlene Moore, Director of the Bureau of Nutrition Services. Each is outstanding in her field and will help to identify areas in which we, as doctors' wives, can be effective.

On October 25, Dr. George J. Lytton of Kansas City will moderate a panel on the subject of "The Middle Years." A psychiatrist, Dr. Lytton is the husband of the Auxiliary's President-Elect, Mrs. Vivian Lytton. Joining Dr. Lytton as panelists will be Dr. Robert Meneilly, Minister of the Village Church, Prairie Village, Kan.; Hilda Choice Anderson, Vice-President, Preferred Business Service Corporation; and Dr. William T. Griffin, Associate Professor, Department of Obstetrics and Gynecology, University of Missouri-Columbia School of Medicine.

In addition to learning about these health-related subjects, we will be privileged to visit the Nelson Art Gallery in Kansas City.

Our National President, Mrs. Willard Scrivner, has made the following statement:

"The time-honored role of the volunteer will enable us to best serve as leaders in our communities. Each project and program we undertake should not be solely our responsibility if we plan well and are a good catalyst. Our ongoing programs will be fully supported while we measure our efforts in new areas of community INVOLVEMENT."

Another important fall event this year was the Environmental Symposium on September 21 in Kansas City. Mrs. Raymond Hartwig, our Environmental Chairman, made the day outstanding by enlisting so many qualified members of the Environmental Protective Agency to speak to us about ecology.

Back to the Fall Conference, we invite all doctors to accompany their wives to our dinner and will be honored by your attendance.

So . . . come along! Make new friends and renew old acquaintances!

EDITORIALS

M. PINSON NEAL, M.D.
1887-1973

(The following memorial service for M. Pinson Neal, M.D. was delivered on Aug. 21, 1973 in Columbia by ***William D. Mayer, M.D.****, Dean of the School of Medicine, University of Missouri-Columbia. Dr. Neal, Professor Emeritus and former chairman of the Department of Pathology at the University of Missouri School of Medicine, died on Aug. 18, 1973 at Boone County Hospital in Columbia.)*

One of the highest honors of my life was bestowed upon me yesterday by M. Pinson Neal, Jr., distinguished physician and medical administrator, when he asked me if I might share a few words with you today concerning his father, Marcus Pinson Neal, Sr. It is an honor for me in that Dr. Neal, the son, has provided me the opportunity to share with you the feelings of esteem, dignity and integrity which all of us have held and shall always hold for Dr. Neal, the father.

I am not here today to honor Dr. Neal, the father, for those honors have been provided in life by every organization or group with whom Dr. M. Pinson Neal has been associated over a long and truly distinguished career: ranging from a citation from General Pershing for his contributions in World War I through awards by the American Red Cross, the Missouri State Medical Association, the Southern Medical Association, the University of Missouri to the presence of more than 400 former students, colleagues and friends who gathered in Columbia from all over the state and the nation on the occasion of his 84th birthday and the publication of his book entitled, *Genesis, Heritage and Progress of Medical Education at the University of Missouri, 1841-1970.*

I am not here, then, to honor Dr. Neal for that has appropriately and justifiably been done by many. Rather, I am here to try to remind those assembled that it is we who have been honored, each in our own individual ways, by our opportunities to have shared this man, this truly remarkable man, in our own lives.

For I would suggest that all of us have been touched in some small way or large, consciously or subconsciously, knowingly or not, by the truly remarkable force and spirit that was and is represented in each of us by M. Pinson Neal.

Obviously, each of you, as you sit here today, know that of which I speak. For each of you, the form, the nature and the occasions of the impact were different, but I suspect for each of us the benefit is lucidly clear.

For me, personally, it began 12 years ago when as a fledgling pathologist, newly in receipt of my Board certification, I arrived as a young Assistant Professor in the Department of Pathology at the University of Missouri. I had the good fortune to share office space with Dr. Neal, then in his 70s and over four decades my senior. I soon learned that this Professor Emeritus with an active, analytical and penetrating mind, was capable of contributing daily to the growth and development of myself and other young faculty members. In addition, it was a pleasure to attend his lectures to second-year medical students and to listen to the spell-binding oratory which enabled him to get across important messages, not only in health and disease, but concerning the profession and even life itself. I often used to think, "If this is M. Pinson Neal at the three-quarter of a century mark, what must he have been like at half century or quarter century or in the years intervening?"

As I traveled through the state and as I visited with alumni of the School of Medicine, the answer and the magnitude of his impact over those years became clear. Former students would ask, whether it be in St. Louis or Kansas City, Maryville or Cape Girardeau, Hannibal or Joplin, let alone Cleveland, New York, Washington or Los Angeles, "How is Pappy Neal doing?" to be followed quickly by such statements as "I never had a greater teacher," "He made us work hard, but I'm thankful he did," "No one ever had a greater impact on my life than he."

And then I said to myself, "How could one man in a span of over five decades continue to have the ability to excite, to influence and to stimulate?" It remained for the publication of his history of our School of Medicine, written for the most part in his eighth decade of life, to provide some fuller understanding of why so many have been honored for so long by Dr. M. Pinson Neal.

I would like then to close with some of M. Pinson Neal's own words from that monograph.

"Quality should be one's guiding and chief ambition. Quality characterizes a person, as sterling and Stradivarius do silver and a violin. Quality, integrity, ability to profit by training and experience are attributes truly and exclusively personal."

"Respect for one's self, and for all with whom one serves, is a worthwhile virtue."

"Reward: Much more than title, vacation and money should be encompassed. As each day's work is done, be able to say to one's self: 'This day I, too, helped in prevention of disease, helped to supply means of restoring health—yes, possibly helped save someone's life, or at least to prolong it.' "

"The quality of a physician depends not alone upon his training, but also upon his mannerisms, mentality, motivation, character, and human thoughtfulness to patient and his family."

"Medicine is something living, and working with students as was done in small classes with concentrated hours and courses in McAlester Hall days, gave it life, and to them enthusiastic interest."

"To inculcate into students the philosophies and personal principles which are so simple, yet so difficult for some to acquire, has been profitable."

"This historical effort is ended, with a sense of fulfillment and satisfaction—not merely because it ends months of labor in which I often felt alone in a wilderness of records and notes—but also because of the rewarding personal attachments that have been mine with so many fine and stimulating students, faculty associates, practicing colleagues, and hospital affiliations. The contacts over 48 years with all groups have been most stimulating and rewarding."

And finally, Dr. Neal closed his monograph with this sentence, "I close with words of Albert Schweitzer: 'Respect for the Dignity of Man and Reverence for Life.' "

It is this man and his full understanding of the Dignity of Man and the Reverence for Life and the respect for one's self and for all whom one serves, and of the true meaning of the words quality and integrity, who has honored each of us in his unique capacity to make these insights meaningful. We will honor M. Pinson Neal, not by being here today, but by remembering that which he helped us learn about life and death and the nature of man and by remembering our obligation to share what he has shared with us with those who will live after we have departed.

On behalf of the thousands of physicians and the tens of thousands of their patients who knowingly and unknowingly, consciously or subconsciously, have benefited from your presence, we give thanks for the honor you have bestowed upon us, Dr. Marcus Pinson Neal.

THE AMERICAN TRAUMA SOCIETY

(In the following editorial, Dr. Allen Klippel extends an invitation to all physicians in Missouri to become founding members of the American Trauma Society. Dr. Klippel is President of the St. Louis County Medical Society.)

On May 7, 1972 in Philadelphia, a group met to found the American Trauma Society. Most physicians are only too acutely aware of the ravages that make this the catastrophic disease of the young adult and the leading cause of death and disability in that group. However, the need is not only for physicians to understand and be involved but, also, to involve the general public in this effort. The American Trauma Society is following the examples of the American Cancer Society and the American Heart Association for these organizations have done much to develop public support against these diseases. And, let's face it. When we speak of public support, we mean public financial support. Many of the developments in the fight against cancer and heart disease are attributable to research supported by these organizations. Similar results must be obtained for the care of the trauma patient.

Many people have a morbid fear of being afflicted with cancer. Yet, the odds are greater that they will be the victim in an accident. It would seem to be enlightened self-interest that they should support programs against trauma. This is even more true when we consider that this is a disease more common in our children and all the young people of our country. These are the persons who will have to solve the problems of what we euphemistically call "communities." After looking around, it is obvious they need all the physical stamina and good health we can try to protect if they are ever to be able to channel all the divisive forces in our country into a true society with common goals and purpose.

It is not to detract from the great successes of the cancer and heart organizations, but, none the less, most cancer and heart problems occur in the aging segments of the population, in persons who have mostly made their contributions. Trauma strikes down the young adult just when he or she has completed the long expensive years of training and just when society could expect to reap the benefits of this experience.

"Founding Memberships" in the American Trauma Society are still available and any physician who is interested or who has a lay friend who might be interested is asked to contact me and I will be only too happy to send along further information. A meeting to form a Missouri Chapter of the American Trauma Society will be held soon. This is the beginning of a state organization that, it is hoped, will be able to develop public awareness and support in Missouri against the disease of trauma. For too long, trauma has been "the neglected disease of modern society." Hopefully, this neglect will be overcome. The American Trauma Society is one way of achieving this goal.

ALLEN P. KLIPPEL, M.D.
St. Louis County Medical Society Bulletin

Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole. **Warnings:** If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established. **Precautions:** Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored. **Adverse Reactions:** Most frequently encountered are anorex nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddine and headache have occurred. Rarely, tinnitus, hyperirritabili numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise i cephalin flocculation and SGOT; perianal rash, cholestasis a parenchymal liver damage; hyperglycemia; transient leukop malodor of the urine, crystalluria, hematuria; appearance of Ascaris in the mouth and nose. Hypersensitivity reactions

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addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

New Members

Thomas T. Crouch, M.D., 208 Medical Plaza, Kansas City, has become a member of Jackson County Medical Society. Dr. Crouch is a native of Valdosta, Ga., received his preliminary education at Colorado College and his M.D. degree at the University of Colorado in 1963. He specializes in nephrology.

Federico N. Florendo, Jr., M.D., 1734 Market, Hannibal, has become a member of Marion-Ralls-Shelby County Medical Society. Dr. Florendo is a native of the Philippines, received his preliminary education at Silliman University and his M.D. degree at the University of the Philippines in 1941. He specializes in pathology.

Howard H. Hamlin, M.D., 4301 Main, Kansas City, has become a member of Jackson County Medical Society. Dr. Hamlin is a native of Lincoln, Neb., received his preliminary education at Northwest Nazarene College and his M.D. degree at the University of Colorado in 1941. He specializes in general surgery.

Kenneth H. Kelley, M.D., 623 Pine Blvd., Poplar Bluff, has become a member of Butler-Wayne-Ripley County Medical Society. Dr. Kelley is a native of Kansas City, received his preliminary education at the University of Missouri and his M.D. degree at the University of Tennessee in 1970. He specializes in pediatrics.

William R. Morgan, M.D., 6700 Troost, Kansas City, has become a member of Jackson County Medical Society. Dr. Morgan is a native of Hawaii, received his preliminary education at the University of Oklahoma and his M.D. degree at the University of Oklahoma in 1958. He specializes in plastic surgery.

A. R. Rao, M.D., 703 W. Main, Fredericktown, has become a member of Mineral Area County Medical Society. Dr. Rao is a native of India and received his M.D. degree at Andhra in 1963. He specializes in internal medicine.

Abbiah N. Reddy, M.D., 623 Pine Blvd., Poplar Bluff, has become a member of Butler-Wayne-Ripley County Medical Society. Dr. Reddy is a native of India, received his preliminary education at Bangalore Medical College and his M.D. degree at Bangalore Medical College in 1963. He specializes in neurology.

Don R. Santschi, M.D., 2220 Holmes, Kansas City, has become a member of Jackson County Medical Society. Dr. Santschi is a native of Kalamazoo, Mich., received his preliminary education at Notre Dame University and his M.D. degree at Loyola University in 1959. He specializes in internal medicine.

Norvin D. Schuman, M.D., Meyer Blvd. at Prospect, Kansas City, has become a member of Jackson County Medical Society. Dr. Schuman is a native of Chillicothe, received his preliminary education at Baker University and his M.D. degree at the University of Kansas in 1957. He specializes in pathology.

Carlton L. Shmock, M.D., 2220 Holmes, Kansas City, has become a member of Jackson County Medical Society. Dr. Shmock is a native of Lakewood, Ohio, received his preliminary education at Indiana University and his M.D. degree at the University of Cincinnati in 1949. He specializes in internal medicine.

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The Disability Income Policy sponsored by the Missouri State Medical Association since 1943 has now been made GUARANTEED RENEWABLE and income benefits are available up to $300.00 weekly to members under age 56 subject to acceptance by the Company.

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County Society News

FIRST DISTRICT

COUNCILOR
JOHN N. MARTIN, M.D., ST. JOSEPH

BUCHANAN COUNTY MEDICAL SOCIETY

The annual election meeting of the Buchanan County Medical Society was held in the Empire Room of Hotel Robidoux in St. Joseph on September 5. The meeting followed a dinner.

Dr. William B. O'Connor was chosen as President-Elect and will head the Society in 1975. Dr. Randal W. Weed, now serving as President-Elect, will be President in 1974. He will succeed Dr. Elza Butler.

Other officers elected were Dr. G. Tyson Carpenter, Vice-President; Dr. John T. Rogers, Secretary; and Dr. Robert W. Kieber, Treasurer. Dr. Kieber will be serving his 21st consecutive term in this office.

Dr. Clement C. DuMont was chosen as censor for a three-year term. Dr. Allen I. Herman was named Delegate to the Missouri State Medical Association. Alternate Delegates elected were Drs. R. Philip Acuff, William B. Rost and Donald J. Stallard. Dr. John N. Martin will serve on the Committee on Public Policy. Dr. Carl K. Ness was named to a five-year term on the Board of Trustees and Dr. Butler was elected to the Executive Secretary Committee.

Officers who will lead the Society in 1974 will be installed at the Society's annual meeting in December.

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In Memoriam

Hubert M. Denny, M.D., P.O. Box 387, Union, a graduate of Washington University, 1925; member of Franklin-Gasconade-Warren County Medical Society; age 72; died July 13, 1973.

Carl T. Eber, M.D., 610 Locust, St. Louis, a graduate of National University, 1917; member of St. Louis County Medical Society; age 81; died July 25, 1973.

Alfred C. Ibaviosa, M.D., 123 Mississippi, Crystal City, a graduate of Santo Tomas University, 1954; member of Jefferson County Medical Society; age 45; died July 28, 1973.

Powel B. Cappel, M.D., 27 Old Westbury, St. Louis, a graduate of St. Louis University, 1927; member of St. Louis Medical Society; age 79; died Aug. 1, 1973.

Garland A. Reynolds, M.D., P.O. Box 817, Cape Girardeau, a graduate of the University of Tennessee, 1938; member of Cape Girardeau County Medical Society; age 58; died Aug. 1, 1973.

Frank R. Bradley, M.D., 7404 Oxford Dr., St. Louis, a graduate of Washington University, 1928; member of St. Louis Medical Society; age 73; died Aug. 3, 1973.

Simon A. Levey, M.D., 4400 Lindell, St. Louis, a graduate of Creighton University, 1917; member of St. Louis County Medical Society; age 81; died Aug. 6, 1973.

Jae H. Yang, M.D., 3541 Ritz Center, St. Louis, a graduate of Severance Union Medical College, Korea, 1945; member of St. Louis Medical Society; age 49; died Aug. 9, 1973.

John B. Jones, M.D., 1700 Stonehill, Columbia, a graduate of Washington University, 1935; member of Boone County Medical Society; age 63; died Aug. 12, 1973.

Sol Weisman, M.D., 500 N. W. Plaza, St. Ann, a graduate of Washington University, 1932; member of St. Louis County Medical Society; age 65; died Aug. 17, 1973.

M. Pinson Neal, M.D., 807 Stadium Rd., Columbia, a graduate of the University College, 1912; member of Boone County Medical Society; age 80; died Aug. 18, 1973.

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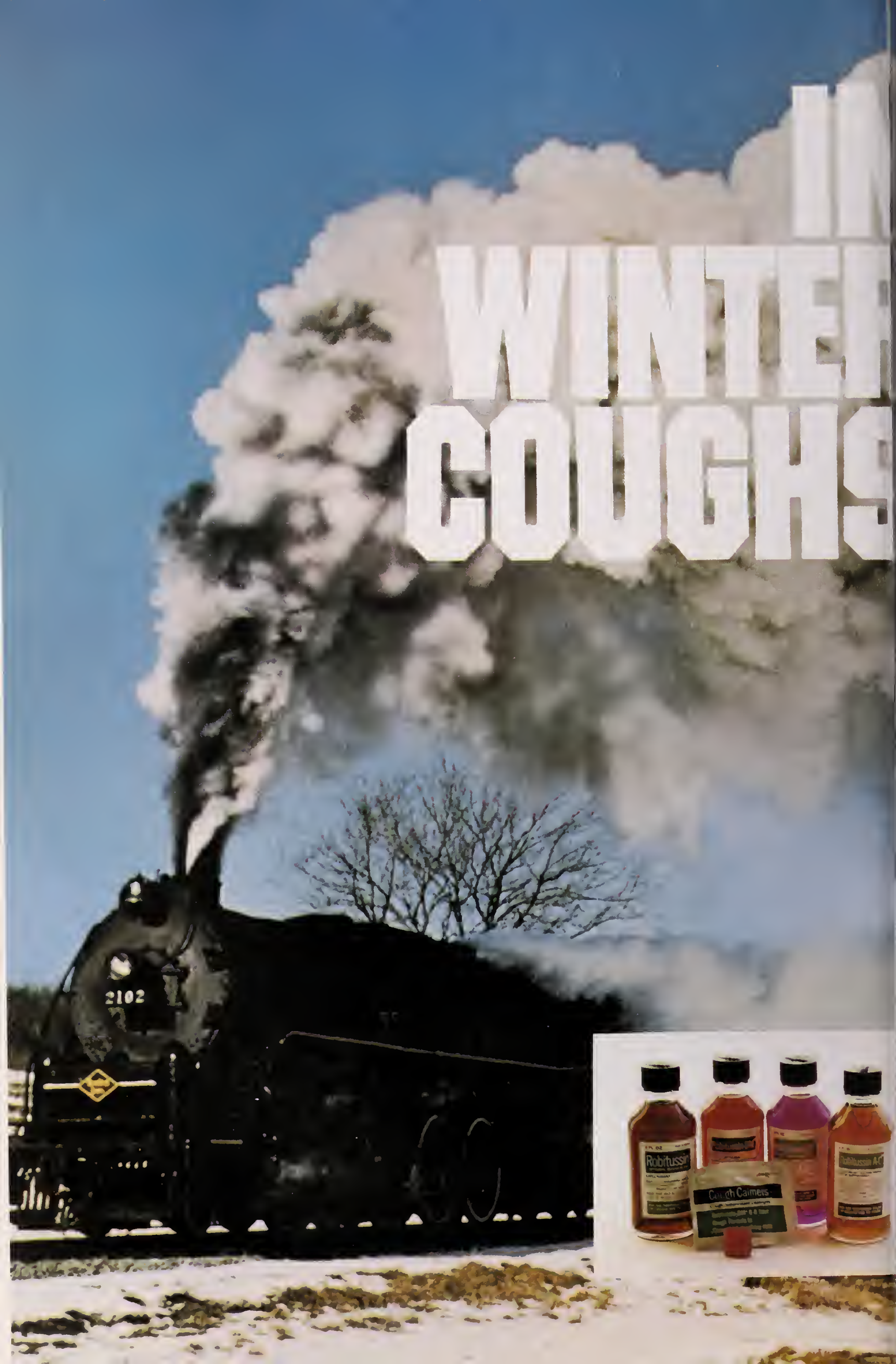
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LEO H. POLLOCK, M.D.

Missouri Medicine in Review

FORTY YEARS AGO

The President's Reemployment Agreement is part of a nationwide plan to raise wages, create employment and, thus, increase purchasing power of the people and restore business. The *Journal of the American Medical Association* editorially has clearly defined our relationship in the August 12 and August 19 issues. We quote in part:

"Probably, the most significant of these questions concerns hours of work for physicians and hours of work and salaries of their assistants and attendants. It has been definitely settled that physicians in the discharge of their professional duties are not within the terms of the National Industrial Recovery Act. A physician may work as many hours as he finds expedient and for as small compensation as he is willing to accept, and he will violate no law and no federal policy. The legislation is not intended to interfere with the personal relationship between physician and patient necessary to the best type of medical care. Physicians have never had definite hours of work; they have always been subject to call at any moment for the benefit of their patients. The rights of the sick man are above hours of work or regulations of this character."

TWENTY-FIVE YEARS AGO

The Kansas City Southwest Clinical Society will present its 26th Annual Fall Clinical Conference on Oct. 4-7, 1948. Sixteen distinguished guest speakers representing general medicine and surgery and many of the medical and surgical specialties will take part in the four-day program. Addresses will be made by Rear Admiral H. L. Pugh, Assistant Surgeon General U. S. Navy and Col. William H. Amspacher, Chief of Procurement Branch, U. S. Army.

E. B. Quarles, M.D., St. Louis, has been appointed head of hospital administration for all Veterans Administration Hospitals.—Edwin C. White, M.D., Kansas City, was elected president of the State Board of Medical Examiners at a meeting in Jefferson City on August 15.

The South Central Counties Medical Society met in Cabool on August 20 for dinner at the El Patio Hotel. The following members were present: Drs. J. A. Fuson, Mansfield; R. W. Denney and A. C. Ames, Mountain Groves; Garrett Hogg, Cabool; T. J. Burns, Houston; C. T. Callihan, Willow Springs; E. C. Bohrer, West Plains; and Ned White and Kenneth Coffeld, Springfield.

TEN YEARS AGO

John Mayer, a junior medical student at the University of Missouri, presents "The Mouse Surgeon" in the *Journal* of September, 1963. This is a beautifully written and prize winning story of the life and contributions of Dr. Evarts Ambrose Graham, the illustrious past Professor of Surgery at Washington University School of Medicine.

In the article, he says, "The men who came to Barnes in those early years eventually spread the reputation of the hospital and Evarts Graham throughout the world. Among his initial students were Barney Brooks, late Professor of Surgery at Vanderbilt University of Virginia, and Alton Ochsner, who established the famous Ochsner Clinic in New Orleans. In nearly every medical institution in this country and in numerous ones abroad, a cursory examination of the surgical service usually turns up one of 'Graham's Boys.'

"A humorous example of the far-reaching consequences of this man's influence was initiated when Barney Brooks accepted a professorship in surgery at Vanderbilt. This excellent surgeon, after training under Dr. Graham, turned out many fine surgeons, among whom was Alfred Blalock. Blalock soon became Professor of Surgery at Johns Hopkins and passed on his knowledge to a promising young man by the name of Rollins Hanlon. Dr. Hanlon is now Professor of Surgery at St. Louis University Medical School. The chickens came home to roost—but in the rival school!"

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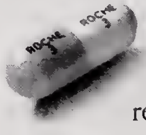

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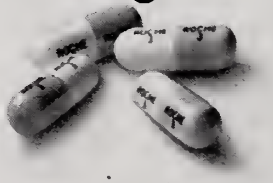

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VOLUME 70, NUMBER 11

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116th MSMA Annual Session
April 4-7, 1974 Kansas City

Everybody experiences psychic tension.

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Some people develop excessive psychic tension and need your counsel

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f so, what his response has
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history, this information can
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ure.

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een the most commonly re-
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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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No sleep cation has been as rigorously evaluated in the sleep research laboratory as Dalmane. Insomnia p given one 30-mg capsule of Dalmane at bedtime, on average: fell asleep within 17 minutes, had fewer time awakenings, spent less time awake after sleep onset, and slept for 7 to 8 hours with no need to dosage during the night.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening, in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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The Weight of Professional Opinion

It's time for action to defend the law and regulations that protect your patients against drug substitution.

These professional and trade organizations are unite in supporting antisubstitution statutes and regulatio

The American Academy of Dermato

The Board of Directors of the American Academy of Family Physicians

The Executive Board of the American Academy of Neurology

The Committee on Drugs of the American Academy of Pediatrics

The American College of Allergists

The Executive Committee of the American College of Obstetricians and Gynecologists

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The Executive Committee of the National Association of Retail Druggists

The Board of Directors of the Pharmaceutical Manufacturers Association

The National Wholesale Druggists' Association

t Statement on Antisubstitution Laws and Regulations

The purpose of this statement is irm the support of the participat- rganizations for the laws, regula- and professional traditions which ibit the unauthorized substitution ug products.

Traditionally, physicians, den- and pharmacists have worked eratively to serve the best inter- of patients. Productive coopera- has been achieved through ual respect as well as a common ern for the ideals of public ce. This mutual respect has been cted, in part, by joint support the years for the adoption and cement of laws and regulations ifically prohibiting unauthorized itution and encouraging joint ission and selection of the e of supply of drug products. asic principles of medical, den- d pharmacy practice are thus ed and preserved in the interest tient welfare.

The antisubstitution laws have ostructed enhancement of the ssional status of pharmacy any than they have in and of them- s guaranteed absolute protec- rom unsafe drugs, or freed cians, dentists and pharmacists their responsibilities to patients. ractical matter, however, such and regulations encourage inter- ssional communications regard- rug product selection and assure profession the opportunity to ise fully its expertise in drug , to the advantage of patients.

Physicians and dentists should ged to increase the frequency egularity of their contacts with nacists in selection of quality products, recognizing that economies to patients can be improved through such communication, taking into account the patients' needs. The pharmacist's knowledge of the chemical characteristics of drugs, their mode of action, toxic properties and other characteristics that assist in making drug selection decisions should be utilized to the fullest extent practicable by physicians and dentists in serving their patients.

Since drug product selection entails knowledge derived from clinical experience, the physician's and dentist's roles in product selection remain primary and do not permit delegation of decisions requiring medical and dental judgments. A broader role in therapy will evolve for pharmacists as improved understanding and cooperation among the professions continue to grow.

There has been no evidence that there are convincing reasons to modify or repeal existing laws and regulations prohibiting the unauthorized substitution of another drug product for the one specified by a prescriber. It is our belief that such laws and regulations merit the joint support of the medical, dental and pharmaceutical professions and the pharmaceutical industry.

Add your opinion to the weight of other professionals and send it to your state assemblyman or legislator.

P·M·A

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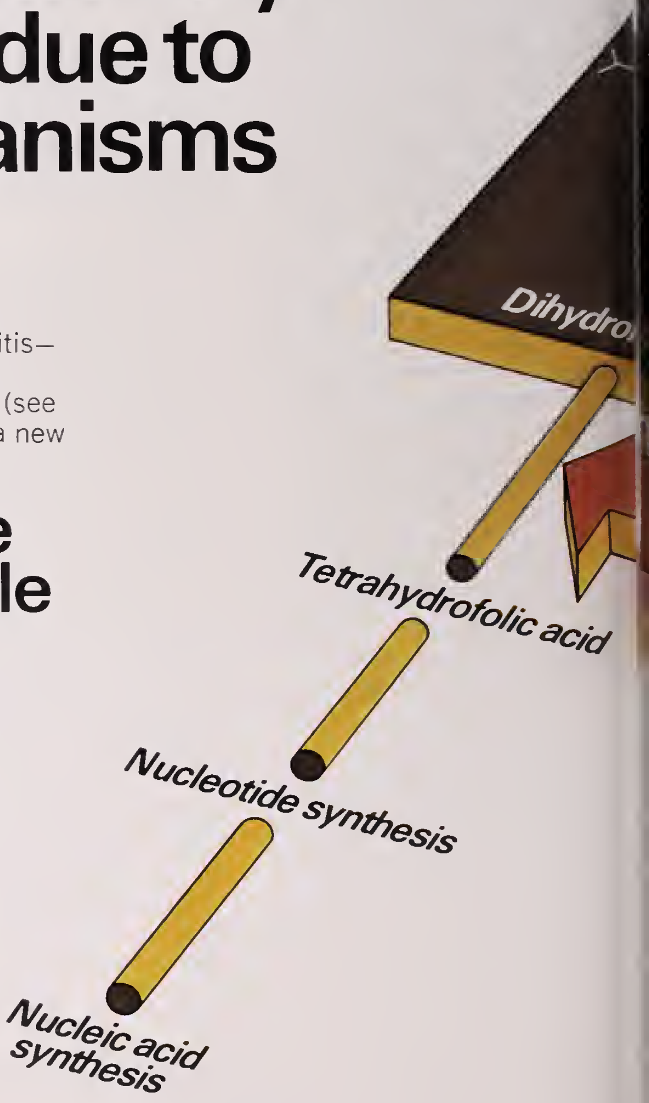
Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

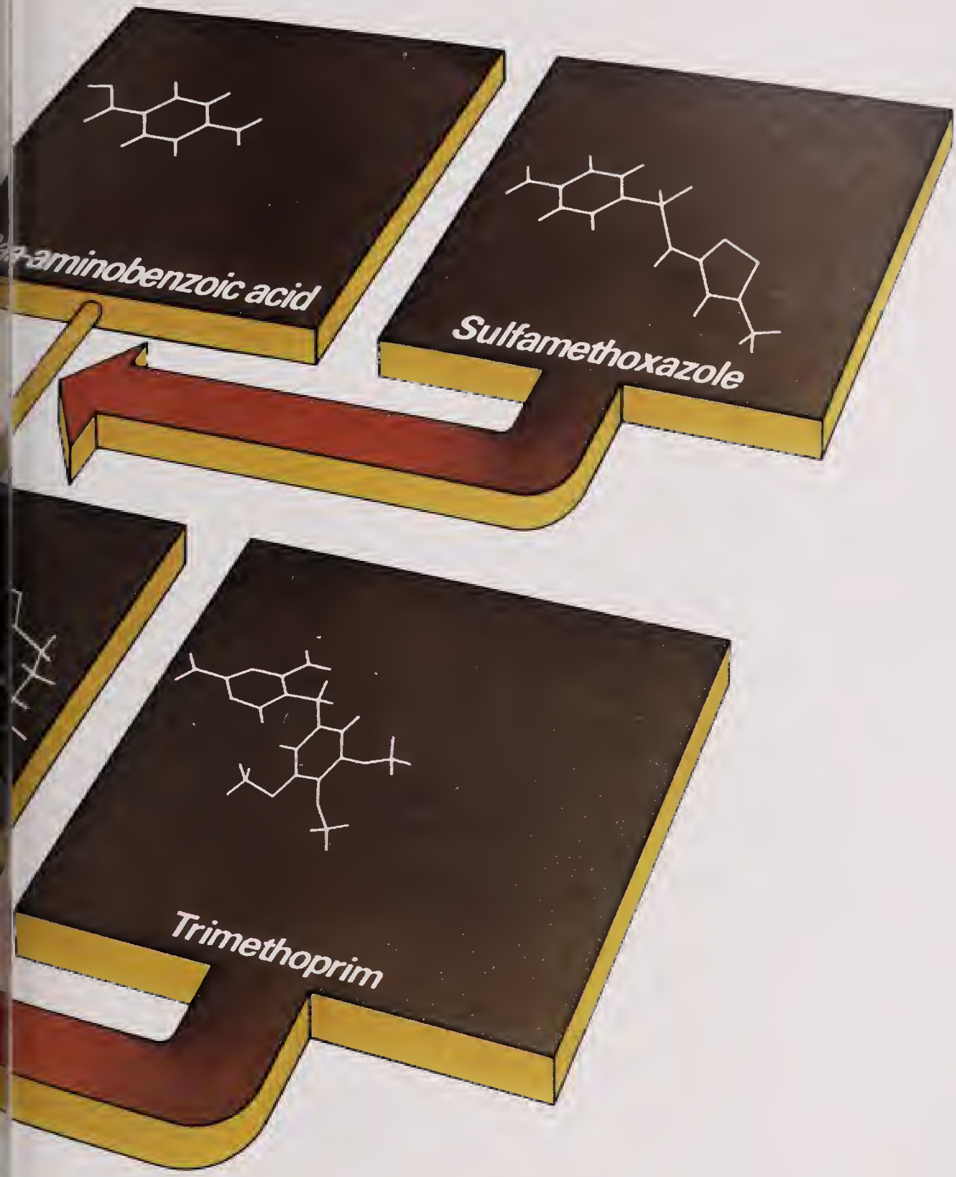
a new type of antibacterial for a two-pronged attack against chronic urinary tract infections due to susceptible organisms

Bactrim is highly effective in the treatment of these infections—primarily pyelonephritis, pyelitis and cystitis—when due to susceptible organisms. This efficacy is related to the unique mode of action against bacteria (see illustration), an action that, in effect, makes Bactrim a new type of antibacterial.

Bactrim interrupts the life cycle of susceptible bacteria

Unique mode of action interrupts the life cycle at two important points, thereby impeding the production of nucleic acids and proteins essential to these bacteria. These consecutive interruptions occur because sulfamethoxazole and trimethoprim resemble naturally existing substrates. By competitive replacement of these substrates, they inhibit further synthesis.

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for chronic urinary tract infections

Before prescribing, please see complete product information on last page of advertisement.

Excellent clinical response in chronic urinary tract infections even with obstructive complications

A multiclinic, double-blind study* of response to a ten-day course of therapy in 471[†] patients with chronic urinary tract infections demonstrated the superiority of Bactrim. On the 10th day after initiation of therapy, 91.7% (of 168 patients) showed significant bacteriological response to Bactrim, compared with 81.2% (of 144 patients) to trimethoprim and 64.5% (of 155 patients) to sulfamethoxazole. More than half of these patients had obstructive complications.

Excellent response maintained

Bactrim proved equally impressive in maintaining this bacteriological response. In the above study, after a ten-day course of therapy with Bactrim, 68.4% of patients with chronic urinary tract infections *maintained* response for up to 42 consecutive days, compared with 59.7% with trimethoprim and 44.4% with sulfamethoxazole. These results are particularly noteworthy considering the number of patients with obstructive complications—cases regarded as being notoriously difficult to treat.

Prescribing considerations

Clinical Limitations: Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of all antibacterial agents, especially in the treatment of chronic and recurrent urinary tract infections. Not recommended for children under twelve.

Contraindications: Hypersensitivity to trimethopri or sulfonamides. Pregnancy and during the nursing period.

Warnings and Precautions: Both sulfamethoxazole and trimethoprim have been reported to interfere with hematopoiesis. Complete blood counts shoul be done frequently. If a significant reduction in the count of any formed blood element is noted, Bactri should be discontinued. Bactrim should be given with caution to patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. Maintain adequate fluid intake. Urinalyses with careful microscopic examination and renal function tests should be performed during therapy, particularly for those patients with impaired renal function.

Adverse Effects: Among the most common side effects are nausea, vomiting, rash, leukopenia and elevations in SGOT and creatinine.

Usual adult dosage: two tablets every twelve hour for 10 to 14 days; no loading dose required.

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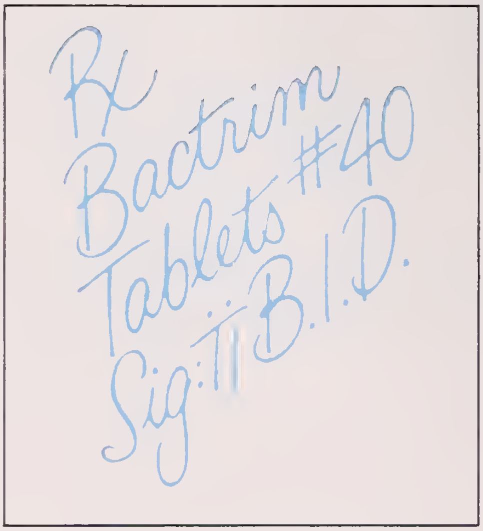
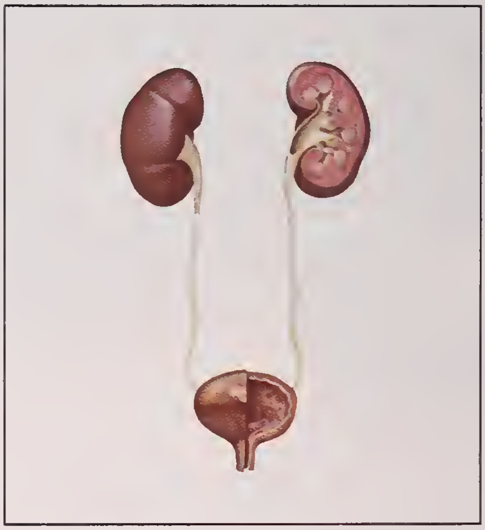
*Data on file, Hoffmann-La Roche Inc., Nutley, N.J. 07110

[†] 4 patients not available for evaluation at day 10.



Rx
Bactrim
Tablets #40
Sig: ĪĪ B.I.D.



new BACTRIM™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

for chronic urinary tract infections

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc
Nutley, N J 07110

Before prescribing, please consult complete product information on facing page.

te Product Information:

tion: Bactrim is a synthetic antibacterial combination prod-
ailable in scored light-green tablets, each containing 80 mg
oprim and 400 mg sulfamethoxazole.

ioprim is 2,4-diamino-5-(3,4,5-trimethoxybenzyl) pyrimidine.
vhite to light-yellow, odorless, bitter compound with a molec-
ight of 290.3.

ethoxazole is N^1-(5-methyl-3-isoxazolyl) sulfanilamide. It is
ost white in color, odorless, tasteless compound with a mo-
weight of 253.28.

Microbiology: Sulfamethoxazole inhibits bacterial synthesis
drofolic acid by competing with *para*-aminobenzoic acid.
oprim blocks the production of tetrahydrofolic acid from di-
lic acid by binding to and reversibly inhibiting the required
, dihydrofolate reductase. Thus, Bactrim blocks two con-
steps in the biosynthesis of nucleic acids and proteins
al to many bacteria.

studies have shown that bacterial resistance develops more
with Bactrim than with trimethoprim or sulfamethoxazole

serial dilution tests have shown that the spectrum of anti-
al activity of Bactrim includes the common urinary tract
ns with the exception of *Pseudomonas aeruginosa*. The fol-
organisms are usually susceptible: *Escherichia coli, Kleb-
nterobacter, Proteus mirabilis* and indole-positive proteus

Representative Minimum Inhibitory Concentration Values for Bactrim-Susceptible Organisms
(MIC—mcg/ml)

a	Trimethoprim alone	Sulfamethoxazole alone	TMP/SMX (1:20) TMP	SMX
chia	0.05—1.5	1.0 —245	0.05—0.5	0.95— 9.5
; spp. positive	0.5 —5.0	7.35 —300	0.05—1.5	0.95—28.5
is	0.5 —1.5	7.35 — 30	0.05—0.15	0.95— 2.85
lla- bacter	0.15—5.0	0.735—245	0.05—1.5	0.95—28.5

Pharmacology: Bactrim is rapidly absorbed following oral
tration. The blood levels of trimethoprim and sulfamethoxa-
similar to those achieved when each component is given
eak blood levels for the individual components occur one
hours after oral administration. The half-lives of sulfameth-
and trimethoprim, 10 and 16 hours respectively, are rela-
e same regardless of whether these compounds are admin-
as individual components or as Bactrim. Detectable
of trimethoprim and sulfamethoxazole are present in the
4 hours after drug administration. Free sulfamethoxazole
nethoprim blood levels are proportionately dose-dependent.
ated administration, the steady-state ratio of trimethoprim
nethoxazole levels in the blood is about 1:20.

thoxazole exists in the blood as free, conjugated and pro-
nd forms; trimethoprim is present as free, protein-bound
abolized forms. The free forms are considered to be the
utically active forms. Approximately 44 percent of trimeth-
nd 70 percent of sulfamethoxazole are protein-bound in the
he presence of 10 mg percent sulfamethoxazole in plasma
es the protein binding of trimethoprim to an insignificant
trimethoprim does not influence the protein binding of
thoxazole.

n of Bactrim is chiefly by the kidneys through both glomer-
ation and tubular secretion. Urine concentrations of both
hoxazole and trimethoprim are considerably higher than
concentrations in the blood. When administered together
ctrim, neither sulfamethoxazole nor trimethoprim affects
ary excretion pattern of the other.

ns: Chronic urinary tract infections (primarily pyelonephri-
itis and cystitis) due to susceptible organisms (usually
Klebsiella-Enterobacter, Proteus mirabilis, and, less fre-
indole-positive proteus species).

***t note:* Currently, the increasing frequency of resistant organ-
limitation of the usefulness of all antibacterial agents, espe-
he treatment of chronic and recurrent urinary tract infections.**

dications: Hypersensitivity to trimethoprim or sulfonamides.
ncy and during the nursing period (see Reproduction

: Deaths associated with the administration of sulfonamides
en reported from hypersensitivity reactions, agranulocyto-
stic anemia and other blood dyscrasias. Experience with
prim alone is much more limited, but it has been reported
ere with hematopoiesis in occasional patients. In elderly
concurrently receiving certain diuretics, primarily thia-
increased incidence of thrombopenia with purpura has
orted.

The presence of clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts should be done frequently in patients receiving Bactrim. If a significant reduction in the count of any formed blood element is noted, Bactrim should be discontinued.

At the present time, there is insufficient clinical information on the use of Bactrim in infants and children under 12 years of age to recommend its use.

Precautions: Bactrim should be given with caution to patients with impaired renal or hepatic function, to those with possible folate deficiency and to those with severe allergy or bronchial asthma. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis may occur. This reaction is frequently dose-related. Adequate fluid intake must be maintained in order to prevent crystalluria and stone formation. Urinalyses with careful microscopic examination and renal function tests should be performed during therapy, particularly for those patients with impaired renal function.

Adverse Reactions: For completeness, all major reactions to sulfonamides and to trimethoprim are included below, even though they may not have been reported with Bactrim.

Blood dyscrasias: Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia.

Allergic reactions: Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis.

Gastrointestinal reactions: Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis.

C.N.S. reactions: Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness.

Miscellaneous reactions: Drug fever, chills, and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L. E. phenomenon have occurred.

The sulfonamides bear certain chemical similarities to some goitrogens, diuretics (acetazolamide and the thiazides) and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents. Rats appear to be especially susceptible to the goitrogenic effects of sulfonamides, and long-term administration has produced thyroid malignancies in the species.

Dosage and Administration: Not recommended for use in children under 12 years of age.

The usual adult dosage is two tablets every 12 hours for 10 to 14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	2 tablets every 24 hours
Below 15	Use not recommended

How Supplied: Tablets, containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 1000; Prescription Paks of 40, available singly and in trays of 10. Imprint on tablets: ROCHE 50.

Reproduction Studies: In rats, doses of 533 mg/kg sulfamethoxazole or 200 mg/kg trimethoprim produced teratological effects manifested mainly as cleft palates. The highest dose which did not cause cleft palates in rats was 512 mg/kg sulfamethoxazole or 192 mg/kg trimethoprim when administered separately. In two studies in rats, no teratology was observed when 512 mg/kg of sulfamethoxazole was used in combination with 128 mg/kg of trimethoprim. However, in one study, cleft palates were observed in one litter out of 9 when 355 mg/kg of sulfamethoxazole was used in combination with 88 mg/kg of trimethoprim.

In rabbits, trimethoprim administered by intubation from days 8 to 16 of pregnancy at dosages up to 500 mg/kg resulted in higher incidences of dead and resorbed fetuses, particularly at 500 mg/kg. However, there were no significant drug-related teratological effects.

BACTRIM™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole. **Warnings:** If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established. **Precautions:** Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.

Adverse Reactions: Most frequently encountered are anorex nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddine and headache have occurred. Rarely, tinnitus, hyperirritabili numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise ir cephalin flocculation and SGOT; perianal rash, cholestasis ar parenchymal liver damage; hyperglycemia; transient leukope malodor of the urine, crystalluria, hematuria; appearance of Ascaris in the mouth and nose. Hypersensitivity reactions

hewable
ablets 500 mg
lintezol®
-ABENDAZOLE | MSD)

easy to take
ryone in the family
keep to the
imen you prescribe

: fever, facial flush, chills, conjunctival injection,
lema, anaphylaxis, skin rashes, erythema multiforme
ng Stevens-Johnson syndrome), and lymphadenopathy.
d: Chewable tablets, containing 500 mg thiabendazole,
s of 36, strip packaged, individually foil wrapped;
sion, containing 500 mg thiabendazole per 5 ml, in
of 120 ml.

e detailed information, consult your MSD representa-
ee full prescribing information. Merck Sharp &
Division of Merck & Co., INC., West Point, Pa. 19486

MSD
MERCK
SHARP&
DOHME

addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

Continuing Education of Doctors To Be Stressed at AMA Convention

Postgraduate courses to help physicians keep abreast of the newest techniques in medical care will be the theme of the 1973 Annual Clinical Convention of the American Medical Association on December 1-5 at Anaheim, Calif.

Six medical schools in Southern California are cooperating with the AMA's Department of Scientific Assembly in offering 30 postgraduate courses. It marks the first time that medical schools have directly cooperated in the program, making available to participants some of the nation's top medical educators.

The scientific program, which is placing special emphasis on continuing education, opens with the exhibit portion of the program at 9 AM on Saturday, December 1 in the Anaheim Convention Center. The general sessions, postgraduate courses and medical films will start the next day.

The AMA's governing body, the House of Delegates, also will hold its semiannual meeting at Disneyland Hotel simultaneously with the scientific assembly.

The convention program is published in the October 15 issue of the *Journal of the American Medical Association.*

Eight of the postgraduate courses will be held from 7:30 AM-9 AM Sunday through Tuesday, December 2-4; 11 will be from 9:30 AM-12:30 PM on those three days; the remaining 11 will be offered from 2 PM to 5 PM on the same three days.

The early morning courses will be on asthma, diagnostic ultrasound, efficient task allocation in medical practice, epilepsy, heart sounds and their interpretations, the impact of welfare policies on health care delivery, industrial medicine and breast tumors.

The 9:30 AM sessions will focus on advanced electrocardiography, new pulmonary diagnostic techniques, coronary risk factors, epidemiology and the management of acutely injured patients, factors affecting fetal development and neonatal adaptation, high-risk obstetrics and fetal monitoring, immunology, new clinical practice from the basic sciences, pulmonary function and blood gases and vascular surgery.

Afternoon sessions will cover the anatomy of surgical procedures, basic electrocardiography, the clinical impact of recent alcoholism research, making critical decisions involving critically ill patients, diagnostic cardiology, liver diseases, diabetes, office evaluation of cervical lesions, child development problems, vascular diseases of the head and neck and salt, water and acid balance and imbalance.

In addition to the postgraduate courses, several general sessions on new dimensions in medicine are scheduled at the Convention Center Sunday through Tuesday.

On Sunday from 9:30 AM to noon, there will be a general session on medicine and from 1:30 PM-5:00 PM on surgery; Monday, 9:30 AM-noon, family practice, and 2 PM-4:30 PM, pediatrics; Tuesday, 9:30 AM-12:30 PM, psychiatry and 2 PM-4:30 PM, obstetrics and gynecology.

A highlight of the medical motion pictures, also to be shown at the Convention Center, will be a symposium on infertility on Monday morning. Among the films will be "The Beginning of Life," which was awarded first prize at the Venice, Padua and Rio de Janiero film festivals. Other films will be shown on Sunday through Tuesday.

More than 100 scientific exhibits, grouped by subject area, will be displayed, including special exhibits on cardiopulmonary resuscitation and fractures. There also will be an area for the "Live Teaching Clinical Program," an expansion of the previous special demonstration exhibit on arthritic diseases. This year the clinic will include other scientific exhibits on specific medical areas such as hypertension, cardiology and dermatology.

MSMA NEWS ROUND-UP

NOVEMBER, 1973

ouncil okays '74 legislative aims

Approval of a legislative program for the up- ming General Assembly Session highlighted the ptember meeting of the MSMA Council in Co- mbia.

The Council indicated its support on the follow- g measures:

1. Delegation Amendment — This bill would pro- le that physicians' trained assistants and nurses uld perform certain services if those services re rendered under the supervision, control and sponsibility of a licensed physician.

2. "Sick Doctor" — This bill contains provi- ns which would allow the State Board of Healing ts to attempt to "salvage" a sick doctor before becomes necessary to revoke the physician's ense. The Council agreed that Missouri physi- ns should be offered the opportunity to study s bill indepth and that wide dissemination of in- mation is necessary. (*An article on the subject included in this publication and similar articles ve been offered for use in county society publi- tions. Also, a copy of the bill has been sent to cretaries of all Component Medical Societies.)*

3. Laboratory Licensing — This bill would pro- le for proper registration of laboratories doing nmercial work.

4. Physical Therapists — This bill provides that y properly trained and qualified physical thera- ts can represent themselves as physical thera- ts.

5. Insurance for Newborn — A resolution passed the 1973 House of Delegates called for a law ich would require health insurance companies provide comprehensive health insurance for new- ns. The Council decided that the best approach this time would be to contact the Missouri Di- ion of Insurance and the Health Insurance Coun- to determine what is currently available and at could be done in the future concerning health urance for newborns.

In other action, the Council:

● Expressed its sorrow at the death of Ar- r W. Neilson, M.D., of St. Louis, a Delegate to AMA and active member of the MSMA and Louis Medical Society.

● Named Robert W. Kelley, M.D., of St. is, as AMA Delegate and Hubert A. Ritter,)., of St. Louis, as Alternate Delegate to serve il Jan. 1, 1974.

● Approved a motion to sell $48,000 in bonds n the MSMA investment portfolio to be applied to the loan which was taken out for the remodeling and furnishing of the new MSMA Headquarters.

● Reiterated its stand that the MSMA should press forward with educational programs concerning the Missouri Medical Political Action Committee.

● Heard a report on the 1973 AMA Annual Session and approved a recommendation by the Delegates to the AMA that a room and time be set aside at the MSMA Annual Session for the Delegates and Alternates to meet informally with the MSMA membership.

● Named R. Allen Chandler, M.D., Kansas City; William D. Bradshaw, M.D., Clinton; and John N. Martin, M.D., St. Joseph, to the Committee on Arrangements for the 116th Annual Session of the MSMA, April 4-7, 1974, at the Crown Center in Kansas City.

● Heard an indepth report on the Health Care Foundation of Missouri and current status of Professional Standards Review Organizations from Hector W. Benoit, Jr., M.D., Chairman of the HCFM and a member of the AMA's National Advisory Council on PSRO. (*A complete report of Dr. Benoit's talk will be included in the meeting minutes which will be published in the December issue of MISSOURI MEDICINE.)*

● Heard an updated report on Comprehensive Health Planning in Missouri from Robert W. Kelley, M.D., Chairman of the Governor's Advisory Council on CHP. (*This report will also be published in full in the December issue of MISSOURI MEDICINE.)*

● Adopted the report of the Commission on Public Affairs which named James Denninghoff, M.D., of Columbia, as Chairman of the Ad Hoc Committee on Environmental and Occupational Health; changed the scope of the 1974 Public Affairs Conference to a "MMPAC Workshop" to be conducted in February; and commended local medical societies for sponsoring Medical Aspects of Sports meeting with area coaches.

● Referred the matter of establishing a policy manual for the MSMA to the Planning Committee.

● Directed that no member of the MSMA staff is to serve as an executive officer for any specialty group, insurance group, foundation or other segment of organized medicine.

● Decided to request a survey of MSMA activities by a special AMA survey team.

● Set the next Council meeting for December 14-16 at the Ramada Inn in Jefferson City.

'Sick doctor statute' . . . . . how does it work

Added support for "sick doctor" legislation is expected in the 1974 General Assembly which convenes January 9.

At its recent September meeting, the MSMA Council directed that "sick doctor" legislation be pre-introduced in the 1974 Legislative Session.

The Council also stated that all Missouri physicians should become aware of the changes in the medical practice act which the new legislation provides. Along with articles in MISSOURI MEDICINE and County Society Bulletins, a copy of the proposed bill has been sent to the secretaries of all County Medical Societies.

A "sick doctor" bill was introduced on the final day of introduction in the 1973 General Assembly at the direction of the MSMA Council. The measure was purposely introduced late so that physicians would have the opportunity to "see it in print" and yet know that the bill did not have a chance of passage during that Session.

Florida and Texas pioneered in the development of "sick doctor statutes" by revising grounds for professional discipline under their medical practice acts to protect the public further against the incompetent or unqualified practice of medicine. Several other states are following suit.

In those states without a "sick doctor statute," disciplining a physician is predicated on his commission of misconduct of a variety of specified grounds, provided that fault could be proved against the physician.

Even though a physician's fitness or ability to practice may be substandard, no violation of the applicable medical practice act occurs unless his alleged misconduct violates a specified standard of behavior.

Therefore, a board of medical examiners is impotent in its desire to protect the public against a physician's incompetence or inability to practice medicine, unless the physician has also committed an act predicated on fault.

The "sick doctor statute" likely to be introduced in the 1974 Missouri General Assembly defines the inability of a physician to practice medicine with reasonable skill and safety to his patients due to one or more enumerated illnesses. It eliminates the need to prove that a physician's clinical judgement is impaired or that he actually injured a patient.

The defined inability can be the result of physical or mental disorders or can arise from excessive use of narcotics and drugs or alcohol.

To protect physicians from harassment, the proposed statute provides that there must be probable cause before the board can act. If probable cause exists, the physician would be required to submit to diagnostic mental or physical examinations. Under the law, medical doctors would be examined by other medical doctors while osteopaths would be examined by osteopaths.

A physician is judged to have given implied consent for such an examination through the act of practicing medicine or filing annual registration to practice in Missouri. The implied consent is further used in the law to waive all objections to the admissibility of the examining physicians' tes
mony or reports on the ground that these are pri
ileged communication.

The proposed law includes a section prohibitir
the use of the records of the proceedings or t
orders of the board to be used against a physici
in any other proceeding.

**If the board determines that a physicia
is unable to practice, it may demand one
the following:**

1. **Deny his application for a license.**
2. **Permanently withhold issuance of a l
cense.**
3. **Administer a public or private repriman**
4. **Suspend, limit or restrict his license f
five years.**
5. **Revoke his license.**
6. **Require him to submit to counseling
treatment of physicians designated by t
board.**

In conjunction with any of the foregoing, t
board may make a finding of guilt but suspe
judgement or penalty or part of the penalty a
place the physician on probation for a specifi
period.

MSMA expresses oppositio to HMO bill before Committe

*In reply to a letter from E. A. Stricker, M.D
President of the Missouri State Medical Associ
tion, Rep. James W. Symington, D-St. Louis, state
his agreement with the MSMA that Senate Bill 1
is objectionable.*

*SB 14 would appropriate $805 million for th
establishment and operation of Health Maintenan
Organizations. In his letter to Rep. Symington, D
Stricker said that besides the excessive cost, ot
er objectionable provisions of SB 14 were that th
bill sets up a discriminatory capitation subsid
that, in effect, provides national health insuran
for one type of practice — HMO's.*

*Dr. Stricker stated that SB 14 overrides sta
laws and forces implementation of HMO's on stat
Also, the bill calls for a Commission on Quali
Health Care, which Dr. Stricker termed an u
necessary and costly duplication of PSRO r
quirements.*

*Dr. Stricker gave qualified support for anoth
HMO bill, House Bill 7974, co-sponsored by Re
Symington. HB 7974 provides for $240 million
be used for limited pilot programs for HMO'
Dr. Stricker asked that a provision in this bi
which would require certain employers who off
health insurance benefits to employees to give th
employee the option to enroll in an HMO be d
leted.*

*This provision would restrict employers an
insurance carriers negotiations since they woul
be dealing with an unknown number of employe
for the insurance plan.*

*Rep. Symington is a member of the Hous
Senate Conference Committee working on th
HMO measures.*

Report From

NOVEMBER, 1973

MMPAC drive set

An educational program designed to increase interest and membership in the Missouri Medical Political Action Committee (MMPAC) is being initiated with this issue of MISSOURI MEDICINE.

Following a resolution passed by the 1973 House of Delegates of the Missouri State Medical Association, the MSMA Council approved plans and funds for implementing several education tools to bolster MMPAC activity and membership.

Current plans call for the publishing of MMPAC news in MISSOURI MEDICINE and establishing a separate MMPAC Newsletter to be mailed to members of the MSMA. Also, a brochure outlining the purposes and goals of MMPAC will be distributed to the membership.

Time to join MMPAC is . . . . NOW!

As another Election Year quickly approaches, the time to join MMPAC is NOW!

- Payment of the annual dues gives you membership in both MMPAC and AMPAC.
- MMPAC and AMPAC dues years correspond with those of the Missouri State Medical Association and the American Medical Association.
- Fill out the coupon below and return it to MMPAC, P. O. Box 755, Jefferson City, Missouri 65101.

MMPAC MEMBERSHIP

Return to:
MMPAC
P. O. Box 755
Jefferson City,
Missouri 65101

Physician	$ 25 ☐
Auxiliary	$ 15 ☐
Family (Husband-Wife)	$ 40 ☐
Sustaining Member	$100 ☐

NAME ____________________

HOME ADDRESS ____________________

CITY ____________________ ZIP ________

COUNTY SOCIETY ____________________

(A copy of MMPAC report filed with the appropriate supervisory officer is (or will be) available for purchase from the Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402)

Comments from the Chairman

by

John N. Martin, M.D.

Due to my activities in the Missouri State Medical Association (MSMA) and the Missouri Medical Political Action Committee (MMPAC), I was given the opportunity recently to reread the "purposes" of the MSMA as stated in its articles of incorporation — something which should be of interest to us all.

As set out in its articles of incorporation, the purposes of the MSMA are:

".....to bring into compact organization the entire medical profession of the State of Missouri aiding thereby the extension of medical knowledge and the advancement of medical science;

"to promote and elevate the standards of medical education;

"to assist in the enactment and enforcement of just medical and public health laws;

"to encourage friendly intercourse among physicians;

"to enjoin and sustain measures of interest and advantage to the public and the medical profession;

"and, to promote the

Continued on next page

Chairman

Continued from page 1

advancement of science, knowledge and skill in the medical profession."

Interesting? Yes!

By rereading these purposes, it is obvious that MMPAC is a natural vehicle to assist in implementing many of the goals of the MSMA.

For example, in order "to assist in the enactment and enforcement of just medical and public health laws," it is necessary that organized medicine in Missouri be heard on these subjects by lawmakers.

MMPAC helps provide medicine with the opportunity to be heard!

To be truely effective, MMPAC needs the active support of physicians and their wives from throughout Missouri.

Join MMPAC — we need each other!! (*Which is more than Nixon and Agnew can say!*)

Auxiliary on move

A continuing drive to enroll more members of the Woman's Auxiliary to the Missouri State Medical Association in MMPAC is planned during the coming months.

Mrs. James A. Reid, of Marshall, Chairman of Auxiliary Public Affairs Committee and a Board member of MMPAC, said that MMPAC information and solicitation was presented at the Auxiliary's Fall Conference in Kansas City during October.

The Auxiliary also plans to take part in the MMPAC Workshop next February.

A change adopted last year in the Rules and Regulations of MMPAC permits Auxiliary members to join MMPAC at a special dues structure of $15 a year. The dues change has already resulted in an increase of Auxiliary membership in MMPAC and Mrs. Reid is confident the trend will continue.

MMPAC information available

Information on MMPAC is readily available by writing to MMPAC, P. O. Box 755, Jefferson City, Missouri 65101 or by contacting a member of the MMPAC Board of Directors.

Board members are:

John N. Martin, M.D., St. Joseph, Chairman; Hubert A. Ritter, M.D., St. Louis, Secretary-Treasurer.

Donald K. Back, M.D., Springfield; B. J. Bass, M.D., Salem; Donald Q. Cochran, M.D., Columbia; E. J. Cunningham, Jr., M.D., Ballwin; J. Will Fleming, M.D., Moberly; Carl M. Peterson, M.D., Kansas City; E. T. Hansbrough, M.D., Poplar Bluff.

Kenneth C. Hollweg, M.D., Kansas City; Mrs. James A. Reid, Marshall; Mrs. Benjamin F. Smith, Clayton; Mrs. Gerald Miller, Kansas City; and Elmer H. Van Dyke, M.D., Sedalia.

Exactly what is MMPAC

Exactly what is MMPAC?

Each edition of MISSOURI MEDICINE which contains MMPAC information will feature a question-and-answer section dealing with various aspects of MMPAC. If you have specific questions, please address them to MMPAC, P. O. Box 755, Jefferson City, Missouri 65101.

Now, what is MMPAC?

MMPAC is a voluntary, non-profit, unincorporated committee of individual physicians and others. The committee is an independent and autonomous organization and has no branches or subsidiary committees. It is NOT affiliated with any political party.

Who should belong to MMPAC?

Physicians and their wives, of course. MMPAC Rules and Regulations also provide that physicians' "friends" may become MMPAC members upon approval of the Board of Directors and payment of dues. "Friends" might include state, county and specialty society medical executives, dentists, pharmacists, nurses and others. AMPAC accepts those persons who have been accepted by MMPAC.

What are the functions of MMPAC?

One function of MMPAC is to promote and strive for the improvement of government by encouraging and stimulating all physicians and others to take a more active and effective part in the political process.

Another function is to encourage all physicians and others to concern themselves with the nature and actions of their government, to understand the importance of the elective process, and to inform themselves on the records of office holders and candidates.

Also, MMPAC should assist physicians and others in organizing themselves for (1) effective political action, and (2) responsible civic participation.

(A copy of MMPAC report filed with the appropriate supervisory officer is (or will be) available for purchase from the Superintendent of Documents, U. S. Government Printing Office, Washington D.C., 20402.)

WASHINGTON

William I. Bauer, M.D., has resigned as director of the controversy-ridden Professional Standards Review Organization (PSRO) program, expressing dissatisfaction with the PSRO organization setup.

The surprise step-down was a shock to the top officials at HEW who have been reeling from the loss of other high officials upset over the lengthy reorganization of the health activities at the HEW department.

Charles Edwards, M.D., Assistant HEW Secretary for Health, interrupted a planned business retreat to hurry back to Washington when news of the resignation filtered out. He called a news conference, but then cancelled it after the reporters had shown up. Dr. Edwards was in conference with HEW undersecretary Frank Carlucci at that time.

The PSRO program is a particularly sensitive one to be subject to the inevitable repercussions and criticisms that follow a resignation. Members of the Senate Finance Committee have been taking a hard line on involvement of state medical societies in the PSRO review of institutional care under Medicare and Medicaid. Some physicians groups and state societies, and the PSRO advisory committee, have urged a broader authority for state societies. In general, HEW and Dr. Bauer had appeared to be attempting a middle course.

Furthermore, the gearing-up for the intricate and complicated program has been a mammoth task for Dr. Bauer.

The 48-year-old Dr. Bauer was named to the PSRO post last March after a career as a practicing internist in Greeley, Colo. Other HEW officials who have resigned in the past several months are Gordon McLeod, M.D., director of the Health Maintenance Organization (HMO) program, and Arthur Lesser, M.D., head of Maternal and Child Health Services.

In a statement, Dr. Bauer said the administration has made a "significant commitment to PSRO but that commitment has not been translated into action. . . ."

"This extremely complex program with ramifications at all levels of medical care has been provided with limited resources and those resources that were made available could not be effectively administered and utilized because of the organizational structure," Dr. Bauer said.

According to a HEW spokesman, the resignation stemmed from a dispute between Drs. Bauer and Edwards over organizational control of the PSRO program. Dr. Bauer was said to believe that he could not exert meaningful authority under the present setup in which much of the field work for PSRO, involving hundreds of physicians, would not come under his line control but under the Bureau of Quality Assurance. Dr. Edwards, the spokesman said, contended that Dr. Bauer would still have the say-so, but Dr. Bauer obviously disagreed.

Underlying the dispute, apparently, has been the effort of Dr. Edwards to pry PSRO control away from Social Security and Social and Rehabilitation Services, present overseers of Medicare and Medicaid and to give the Health Department clear jurisdiction in PSRO.

Under the reorganization, 50 physicians at Social Security and 150 in the Health Services Administration are assigned to PSRO but not directly under Dr. Bauer who had 36 staff positions.

There was no indication from Dr. Bauer of any philosophical differences with the administration over how PSRO would function at the local and state level.

* * *

The House has approved legislation that will provide federal funds to start a limited number of experimental Health Maintenance Organizations over a five-year period to the tune of $240 million. The Senate's version of HMOs, passed months ago, would provide $805 million over the same period. House and Senate conferees must now resolve the differences.

The compromise bill voted by the House calls for spending $60 million this fiscal year, the Administration figure. The bill meets many objections raised to the original measure by the Administration and the American Medical Association.

Though no specific number limitations was set in the House bill, the limit of authorizations to $240 million will provide an effective ceiling on the number of HMOs which could be established. The House Commerce Committee estimated the legislation would be used to bring to the operating stage approximately 100 new HMOs.

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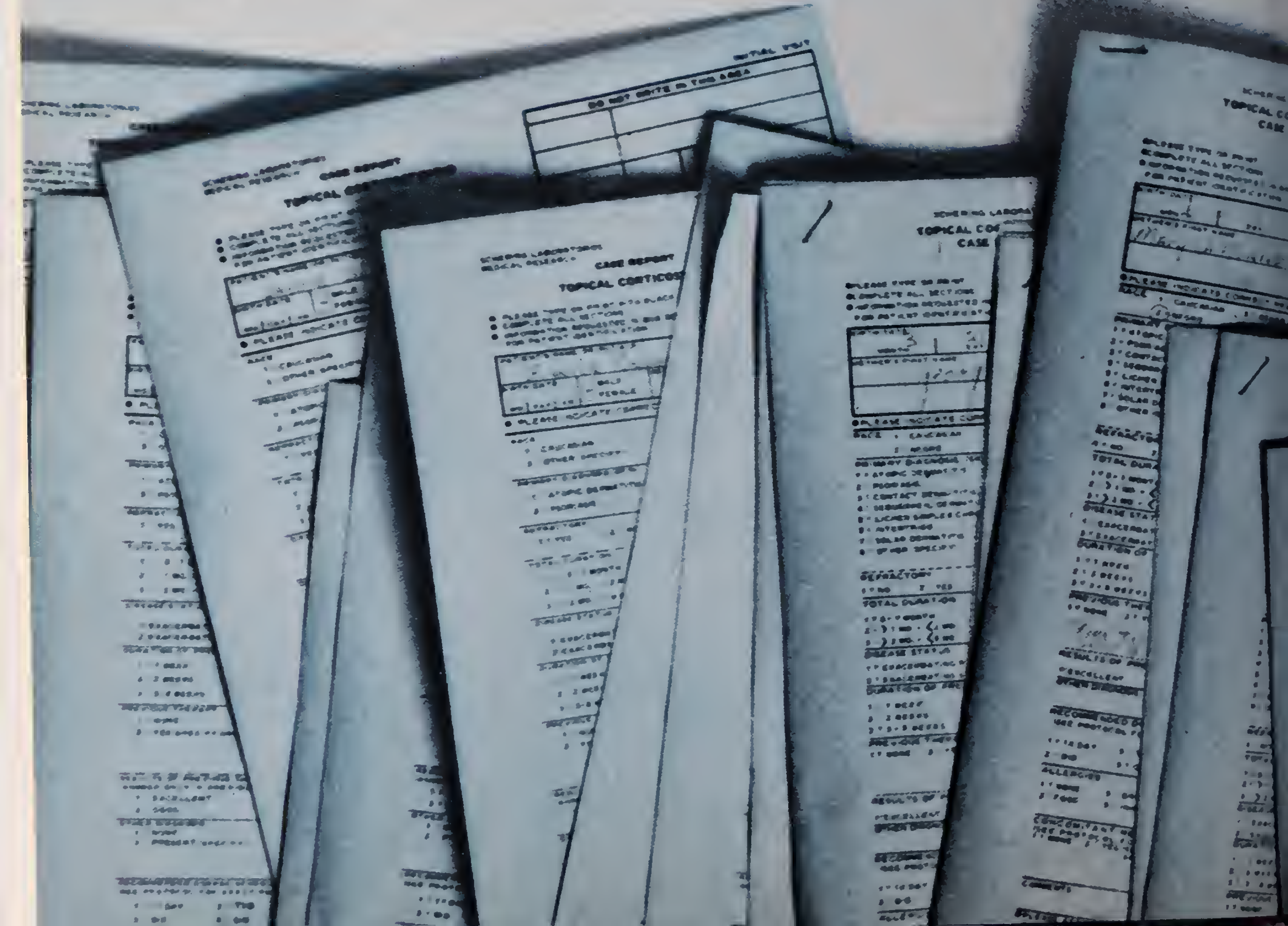

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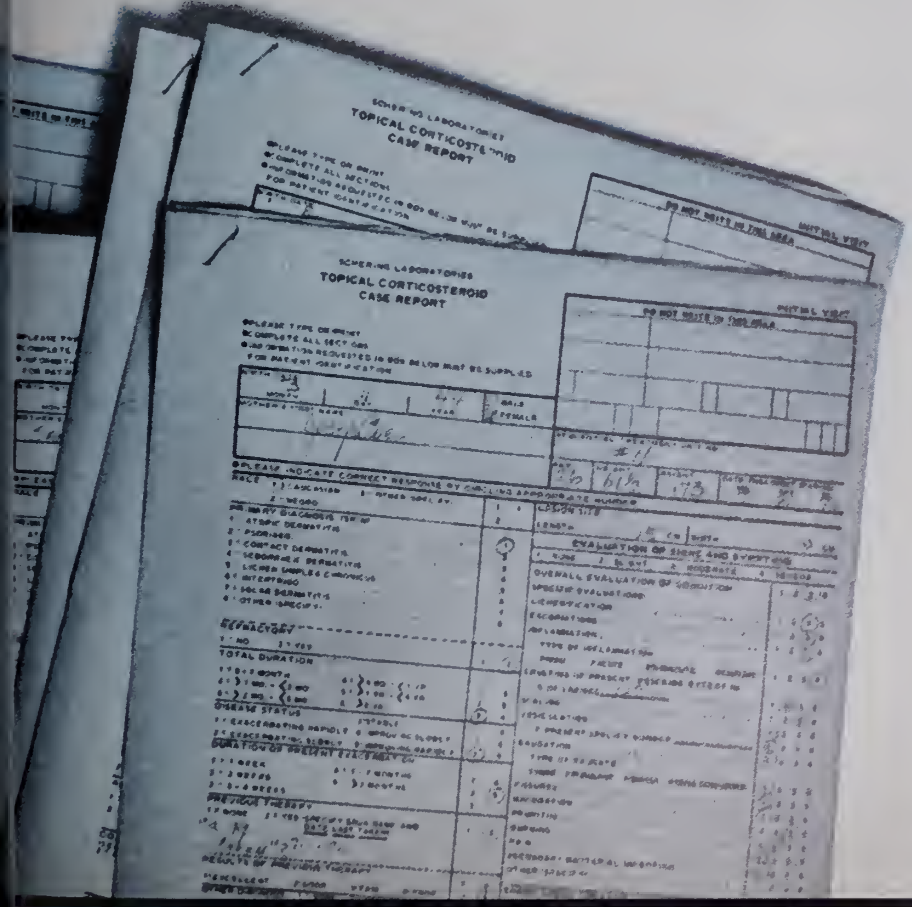

SCHERING LABORATORIES
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CASE REPORT

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INITIAL VISIT

PRIMARY DIAGNOSIS

ATOPIC DERMATITIS

PSORIASIS

CONTACT DERMATITIS

SEBORRHEIC DERMATITIS

TOTAL DURATION

DISEASE STATUS

PREVIOUS THERAPY

EVALUATION OF SIGNS AND SYMPTOMS

OVERALL EVALUATION OF CONDITION

CLINICAL CONSIDERATIONS:
Description VALISONE products contain betamethasone valerate (9-fluoro-11$_\beta$,17,21-trihydroxy-16$_\beta$-methylpregna-1,4-diene-3,20-dione 17-valerate). Each gram of VALISONE Cream 0.1% contains 1.2 mg. betamethasone valerate (equivalent to 1.0 mg. betamethasone) in a soft, white, hydrophilic cream of water, mineral oil, petrolatum, polyethylene glycol 100 monocetyl ether, cetostearyl alcohol, monobasic sodium phosphate, and phosphoric acid; 4-chloro-m-cresol is present as a preservative. Eac gram of VALISONE Ointment 0.1% contains 1.2 mg. betamethasone valerate (equivalent to 1.0 mg. betamethasone) in an ointment base of liquid and white petrolatum, and hydrogenated lanolin. VALISONE Cream and Ointment contain no parabens.
Indications VALISONE Cream and Ointment are indicated for the relief of the inflammatory manifestations of corticosteroid-responsive dermatoses.
Contraindications VALISONE Cream and Ointment are contraindicated in vaccinia and varicella. Topical steroids are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.
Precautions If irritation develops with the use of VALISONE Cream or Ointment, treatment should be discontinued and appropriate therapy instituted. In the presence of an infection, the use of an appropriate antifungal or antibacterial agent should b instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled. If extensive areas are treated or if the occlusive technique is used, the possibility exists of increased systemic absorption o the corticosteroid and suitable precautions shou be taken. Although topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use in pregnant female has not been absolutely established. Therefore, they should not be used extensively in pregnant patients, in large amounts, or for prolonged periods of time. VALISONE Cream and Ointment are not for ophthalmic use.
Adverse Reactions The following local adverse reactions have been reported with topical corticosteroids: burning, itching, irritation, dryness, folliculitis, hypertrichosis, acneform eruptions, and hypopigmentation. Th following may occur more frequently with occlusive dressings than without such therapy: maceration of the skin, secondary infection, skin atrophy, striae, and miliaria.
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For more complete details, consult Scheri literature available from your Schering Representative or Professional Services Department, Schering Corporation, Kenilworth, New Jersey 07033.

References: *(1) Files of Headquarters Medical Research Division, Schering Corporation. (2) Carter, V. H., and Noojin, R. O.: Curr. Therap. Res. 9:253, 1967. (3) Falk, M. S.: Cutis 2:788, 1966. (4) Goldblum, R. W.: Pennsylvania Med. 69:50, 1966. (5) Nierman, M. M.: J. Indiana M. A. 10:1184, 1966. (6) Zimmerman, E. H.: Arch. Dermat. 95:514, 1967.*

SLR

The bill has a flat five-year cut-off for the HMO program.

Unlike the Senate bill, the House legislation does not preempt state laws that restrict formation of HMOs. The reason given by the House Commerce Committee was "the rapid change already underway in state legislation designed to remove these barriers." Approximately 20 states have already adopted legislation specifically authorizing HMOs.

The bill limits grants or contracts for planning and initial development costs by prohibiting this assistance after 1976.

Initial development assistance would be prohibited after 1977.

Loans and loan guarantees for initial operation costs are authorized except that loan guarantees could be provided only if the HMO will serve residents of a medically underserved area.

The bill has no authority for loan guarantees for construction projects.

For grants and contracts for feasibility studies, initial planning and initial development costs, the bill would authorize $40 million for fiscal year 1974, $45 million for fiscal year 1975 and $50 million for fiscal year 1976. In addition, it would authorize $55 million for fiscal year 1977 for grants and contracts for initial development costs. The bill would authorize $20 million for fiscal year 1974 and $30 million for fiscal year 1975 to be appropriated to the loan fund.

The bill, unlike the original subcommittee bill, has no authority for demonstration grants and contracts for enrollment of the indigent, for providing service in rural medically underserved areas and for enrollment of high risk individuals. There also is no authority for special project grants and contracts, for grants for HMO management training and for program evaluation.

Provisions for protection against insolvency of HMOs, against the cost of providing unusual amounts of health services or of providing out of area health services, and protection against unusual losses were not contained in the final bill. Also deleted were provisions which authorized technical assistance and consultative services to aid in the planning or development of an HMO.

* * *

President Nixon has won a showdown with Congress on health spending. The House failed to override his veto of the emergency medical services bill, making the veto stand and bolstering the administration's hopes of curbing federal spending this year.

The Senate voted before the August recess to overturn the veto.

In the interval, pro-Administration and anti-Administration forces and supporters of the bill worked hard to line up House votes for their sides in what was regarded as an important test of the President's powers.

The bill authorized $185 million over three years to aid state and local governments to set up emergency medical services to cope with auto crashes and the like. In his veto message, President Nixon said the measure would establish "a large new federal program in an area which is traditionally a concern of state and local governments."

The chief executive also criticized a rider to the bill ordering the continued operation of eight public health service hospitals. He said "their inpatient facilities have now outlived their usefulness to the federal government."

Despite the Administration's opposition, the bill sailed through Congress by overwhelming votes.

The House vote on the veto was viewed as a key battle in the legislative war pitting congressional democrats against the Administration, a fight not only involving the issue of economy in government but the powers of Congress and the powers of the executive branch.

President Nixon had been successful in four previous vetoes this year.

* * *

Labor's leading proponent of a sweeping National Health Insurance bill, Leonard Woodcock of the united autoworkers, engineered a tentative agreement with the Chrysler corporation requiring the company to pay the full workers' tab for any National Health Insurance plan that comes down the pike.

It was believed to be the first such provision in a major labor settlement and made clear labor leaders' desire to have management shoulder the full cost of NHI. The agreement made dollars and sense from the standpoint of the UAW, but took some of the gloss off the repeated Woodcock assertions before congressional committees that workers are willing to pay their fair share of any national health program.

Steven Schlossberg, UAW's general counsel, was quoted as saying that autoworkers have always supported NHI, but "now they have even more incentive to press for its passage since, because of the new contract, there is no economic incentive for them to be against it."

The agreement states that in the event a National Health Insurance program is enacted Chrysler will be required to pay any direct premium or taxes which may be levied on workers.

medical melange

Notes of interest from Here . . . . and There

Dr. James A. Felts, St. Louis, was reelected Vice-Speaker of the House of Delegates of the American Society of Anesthesiologists at the annual meeting of the 12,200 member organization in October. Dr. Felts is Assistant Professor of Anesthesiology at Washington University School of Medicine and a staff member at Barnes Hospital. He is a former president of the Illinois Society of Anesthesiologists, has served the ASA as a member of the House of Delegates, a member of the Board of Governors of the American College of Anesthesiologists and on various ASA committees.

Dr. William C. Banton, II, former St. Louis Health Commissioner, has been named director of the new St. Louis County Department of Community Health and Medical Care by County Supervisor **Lawrence K. Roos**. The new department, which must be approved by the County Council, will be a consolidation of the County Health Department and County Hospital.

Dr. Robert M. Myers, Kansas City, was the keynote speaker for adults at the annual Fall Assembly of the Christian Church of Third District in Missouri in Hannibal on September 30. Dr. Myers is a past-president of the Missouri and Kansas City Academies of General Practice, has received awards of merit for civic leadership and is a church school teacher and elder in the Country Club Christian Church of Kansas City. He also is an ordained Christian minister. The subject of his address was “Celebrating Our Response-Ability.”

Dr. Philip V. Dreyer, Huntsville, has qualified for an exclusive blood donor honor by making 30 trips since May, 1949, to contribute a pint of blood when the bloodmobile stopped in Moberly. On September 13, Dr. Dreyer gave the pint of blood that made him a ten-gallon donor. He received a pin in recognition of his contribution. Dr. Dreyer, who has practiced medicine in Huntsville for 36 years, has served the community in various capacities, including membership on the city council and school board. He has served two terms as President of Chariton-Macon-Monroe-Randolph County Medical Society.

Dr. Ben N. Till, Poplar Bluff, Chairman of the Ozark Health Care Council, was the featured speaker at the regular breakfast meeting of the Poplar Bluff Optimist Club on September 17. He outlined plans for area emergency health care services.—**Dr. Adolph Mueller**, Joplin, was guest speaker at the September meeting of the Joplin Community Multiple Health Association at St. John’s Medical Center.

An original oil painting was presented to **Dr. R. W. Smith** of Brookfield as a going-away gift from friends and patients. Dr. Smith began practice in Marceline in 1948 and later moved to Brookfield and became a staff member at Pershing Memorial Hospital. Dr. Smith recently left that area to assume a position in the medical services of an industrial firm in Granite City, Ill. The painting is an oil still life done by Apatfalvi Czenc Janos, who was born in 1895 and presented his first exhibit in 1921 after study in Rome and Vienna.

The Doctor in Your House Needs Hawaii in February . . .

. . . and so does the spouse.

Maui, "the valley island," has been reserved from February 16 to 23, 1974, just for you.

The elegant Maui Surf Hotel is where it's at, and the Royal Kaanapali Golf Course, the Royal Lahaina Tennis Club, and the golden sands are but steps away—waiting for you.

Why February of 1974? That's when the Washington University Medical Alumni Association has scheduled its First Annual Clinical Conference.

To clinically update the doctors, there are meetings in the mornings. But the afternoons and evenings are strictly "as you like it." There also are entertaining and educational events planned for the ladies.

It's at that time of the year when **everyone** needs to get away.

The Program:

JACK BARROW, M.D. '46—Instructor in Clinical Medicine, Washington University; Past-president, Medical Center Alumni Association. "The Allergic Emergency; Management of the Acute Anaphylactic Reaction."

RUSSELL J. BLATTNER, M.D. '33—J. S. Abercrombie Chairman of Pediatrics, Baylor College of Medicine. "Congenital Rubella."

ELMER B. BROWN, M.D. '50—Professor of Medicine, Associate Dean for Continuing Medical Education, Washington University. "Iron Deficiency: Diagnosis, Treatment, Prevention."

PAULA L. CLAYTON, M.D. '60—Associate Professor of Psychiatry, Washington University. 1) "Attempted Suicide: Psychiatric Emergency," 2) "Conjugal Bereavement."

MARSHALL B. CONRAD, M.D. '45—Assistant Professor of Orthopedic Surgery, Washington University; Past-president, Medical Center Alumni Association. 1) "Emergency Medical Service Systems," 2) "Children's Fractures."

RALPH W. HALE, M.D. Illinois '60—Professor and Chairman of the Department of Obstetrics and Gynecology; Assistant Dean, University of Hawaii. 1) "Our Experience Since Passage of Liberal Abortion Law in Hawaii," 2) "Medical Education as Presented in the Land of Aloha."

JOHN C. HERWEG, M.D. '45—Professor of Pediatrics, Associate Dean, Washington University. 1) "WUMS Curriculum: Past, Present and Future," 2) "Medical School Admissions: The Challenge of Selection."

CHARLES S. JUDD, JR., M.D. Harvard '46—Professor of Medical History and Surgery, University of Hawaii. "Medicine in Polynesia and Trust Territories."

DAVID M. KIPNIS, M.D. Maryland '51—Busch Professor and Head of the Department of Medicine, Washington University. 1) "Future Directions of Departments of Medicine," 2) "Various Types of Metabolic Coma."

FRANK McDOWELL, M.D. '36—Clinical Professor of Plastic Surgery, University of Hawaii. "My Observation of People's Republic of China."

GRANT N. STEMMERMAN, M.D. McGill '43—Clinical Professor of Pathology, University of Hawaii. "Ecology of Cancer in Japanese Living in Hawaii."

Program Chairman
JAMES A. WOOD, M.D. '49—Instructor in Clinical Medicine, Washington University; President, Medical Center Alumni Association.

Cost per person: From Los Angeles, $493; Denver, $534; St. Louis, $559; Chicago, $568; Dallas, $583; Indianapolis, $594; New York, $628.

All arrangements are being made by Lee Kirkland, president of Group Travel Services, Kansas City. Inexpensive optional extensions are available to neighboring islands.

Please send me complete information about that glorious week on Maui in February, 1974.

WASHINGTON UNIVERSITY MEDICAL
CENTER ALUMNI ASSOCIATION
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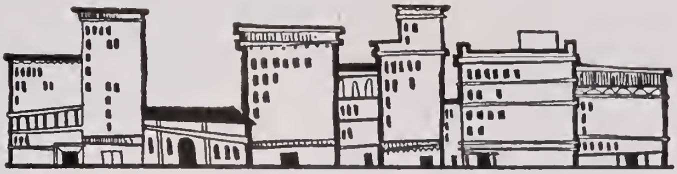
From the Medical Schools



ST. LOUIS UNIVERSITY

St. Louis University's School of Nursing and Allied Health Professions graduated its first class in the Physician's Assistant Program in late August. Graduation climaxed 24 months of study for the eight graduates. A total of 16 students enrolled in September.

Dr. Francis Zacharewicz, program director, awarded certificates. *Dr. Donald R. Judd,* president of the St. Louis Medical Society and associate clinical professor of surgery at the School of Medicine, addressed the graduates and guests.

The eight graduates, all from the bi-state area, have taken positions with institutions and private practitioners in the St. Louis metropolitan area and rural Missouri and Illinois communities.

Dr. Henry Pinkerton, professor and chairman emeritus of the Pathology Department, has been notified that the Council of the American Association of Pathologists has selected him as the 1974 recipient of the Gold Headed Cane. The award will be made on March 11, 1974 at the annual banquet of the association in San Francisco. This award is being bestowed in recognition of Dr. Pinkerton's great and long contributions to pathology. The Gold Headed Cane award is the highest honor fellow pathologists can bestow upon their colleagues.

Nobel Laureate *Sir Hans A. Krebs,* professor of biochemistry at Oxford University, delivered a special lecture on sugar metabolism sponsored by the Edward A. Doisy Department of Biochemistry at the School of Medicine on October 3.

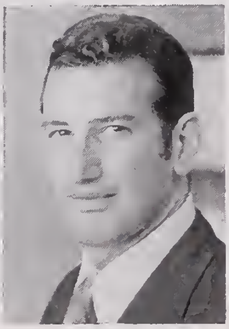
Sir Hans met with Nobel Laureate *Dr. Edward A. Doisy, Sr.,* chairman emeritus of the Department of Biochemistry at the School of Medicine before he visited the laboratories of *Dr. Robert E. Olson,* professor and chairman of the Department of Biochemistry, who spent a year's sabbatical working in 1961-1962 with Sir Hans at Oxford on the respiration of heart muscle.

Among the famed researcher's contributions to his field of biochemistry is the discovery of the citric acid cycle or Krebs Cycle.

Recent faculty members appointed at the St. Louis University School of Medicine are *Roger H. Secker-Walker,* M.R.C.P., associate professor of internal medicine (secondary appointment—associate professor of physiology); *Larry E. Alves,* M.D., assistant professor of internal medicine; *Francis A. Zacharewicz,* M.D., assistant professor of physician's assistant; *Sarah J. Richards,* M.D., assistant professor of pediatrics; *Dennis M. O'Connor,* M.D., assistant professor of pediatrics; *Charles C. Schober,* M.D., clinical professor of psychiatry; *William V. Miller,* M.D., assistant clinical professor of pathology; *Ivy (Thomas) Benjamin,* M.B.B.S., D.G.O., instructor in pathology; *Garry L. Carls,* M.D., instructor in radiology; *Anastasios K. Dagartzikas,* M.D., instructor in gynecology and obstetrics; *Hobart R. Hansen,* M.D., instructor in internal medicine; *Abraham M. Phillips,* M.D., instructor in pediatrics; *Joseph V. Prusaczyk,* M.D., instructor in pediatrics; *Richard A. Rudman,* M.D., instructor in radiology; and *Suheyla F. Savci,* M.D., instructor in radiology.

WASHINGTON UNIVERSITY

Burton E. Sobel, M.D., has been appointed Director of the Division of Cardiovascular Diseases at the Washington University School of Medicine by *David M. Kipnis,* M.D., Busch Professor and head of the Department of Medicine.



Dr. Sobel

The 36-year-old physician comes from the University of California-San Diego School of Medicine where he was director of the Coronary Care Unit and the Myocardial Infarction Research Unit.

He has published extensively on diseases of the heart, and has served as associate medical editor of the *Heart Bulletin.* Dr. Sobel is editor of *Clinical Cardiology* and on the editorial board of *Circulation.* In 1971, he received a Career Development Award from the National Heart and Lung Institute. In the same year he was appointed to the advisory panel on cardiovascular renal drugs for U. S. Pharmacopeia.

The first annual lecture honoring the late Carl V. Moore, M.D., was given on September 21 at Washington University School of Medicine. *Paul A. Marks,* M.D., professor of medicine and vice-president for health services at Columbia University College of Physicians and Surgeons, spoke on "The Thalassemia Syndromes—Genetic and Biochemical Aspects."

Dr. Moore, who died on Aug. 13, 1972, was head of the Department of Medicine from 1955 until his death. He was dean of the Medical School (1954-1955) and the first vice chancellor of medical affairs (1964-1965). A pioneer in the investigation of iron deficiency anemia and other blood diseases, Dr. Moore was elected to the National Academy of Sciences in 1970.

Nearly $60,000 has been awarded to two Washington University School of Medicine researchers by the March of Dimes.

Joseph F. Nee, president of the National Foundation-March of Dimes, announced that *Carl H. Smith,* M.D., assistant professor of pediatrics and pathology, has received $45,654 to study some aspects of how amino acids (the building blocks of proteins) are transported from a mother's bloodstream to her unborn child.

Richard E. Marshall, M.D., associate professor of pediatrics and director of the Division of Neonatology, has been given $14,080 to determine how and when enzymes (catalytic proteins) act in relation to both normal and abnormal development of the fetus.

George H. Bishop, emeritus professor of neurophysiology at the School of Medicine, died on Oct. 11, 1973. A memorial service will be scheduled in the near future.

Recognized as one of the great leaders in physiology of brain and nerve tissue, Dr. Bishop began his work in the early '20s in collaboration with Doctors Herbert S. Gasser and Joseph Erlanger who received the Nobel Prize in 1944 for their original studies of the electrical phenomena of nerve activity.

Dr. Bishop was also well known for his research involving the mechanism of nerve impulse and of pain. He also studied the patterns of development of higher level nervous systems. His basic work on electrical activity of brain tissue was instrumental in the development of electroencephalography as a diagnostic tool in the understanding of epilepsy.

The St. Louis Medical Society honored Dr. Bishop with the Gold Medal in 1959. In 1967, Dr. Bishop was recognized by election to the prestigious National Academy of Sciences and was given the Karl Spencer Lashley Award by the American Philosophical Society.

UNIVERSITY OF MISSOURI-COLUMBIA

Three physicians are among the 12 alumni and 12 faculty members of the University of Missouri-Columbia who were honored at ceremonies on September 21. They are *James O. Davis,* M.D.-Ph.D., chairman of the Department of Physiology in the School of Medicine, UMC; *Major General Carl W. Hughes,* chief surgeon for the U. S. Army, Pacific Area and commander of Tripler Army Medical Center in Honolulu; and *Cortez F. Enloe, Jr.,* M.D., editor and publisher of *Nutrition Today.*

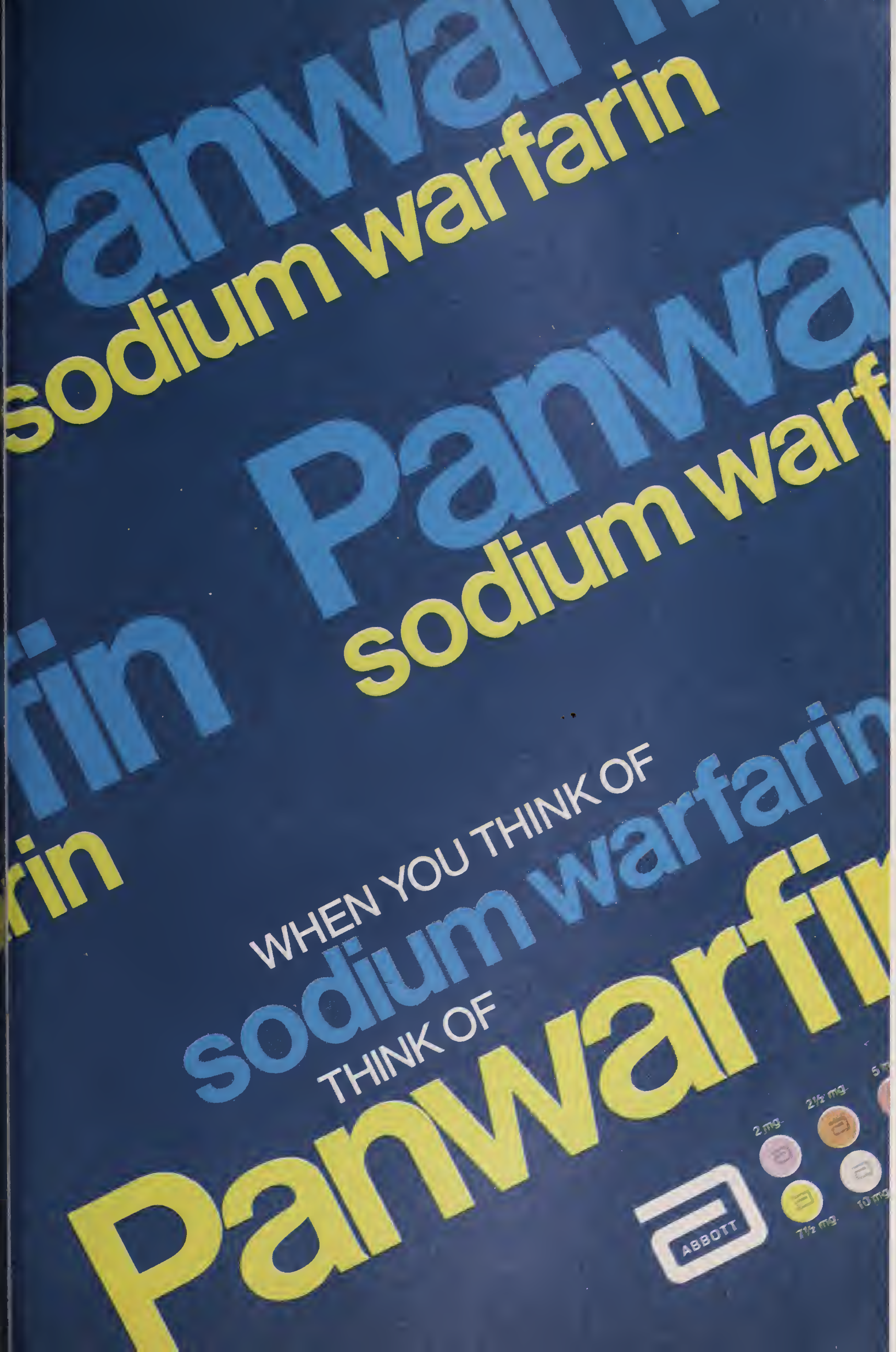
General Hughes and Dr. Enloe were invited to lecture at the University Medical Center on September 21 while in Columbia. All three physicians were honored at a reception in the Postgraduate Lounge.

Sir Hans A. Krebs, M.D., 1953 Nobel Prize Laureate in physiology and medicine, accepted an invitation to be the guest lecturer at the 16th West Central States Biochemistry Conference in Columbia October 26-27.

Noted for his discoveries concerning biochemical pathways—including the ornithine-urea cycle, the citric acid cycle and, with H. L. Kornberg, the glyoxylate cycle—Professor Krebs also has pioneered in the regulation of metabolism. He continues his active research investigations in the Metabolic Research Laboratory, Nuffield Department of Clinical Medicine, Oxford, England.

Professor Krebs' long and distinguished career in biochemical research began in Germany in the 1920's. He left that country in 1933 as a refugee and joined Sir Frederick G. Hopkins' Biochemical Laboratory at Cambridge University. In 1945 he founded the Medical Research Council Unit in Cell Metabolism at the University of Sheffield; it was moved to Oxford University in 1954.

Richard A. Guthrie, M.D., a member of the faculty in the Department of Pediatrics for ten years, has accepted the position as professor and chairman of the Department of Pediatrics at Wichita State University Branch of the University of Kansas School of Medicine.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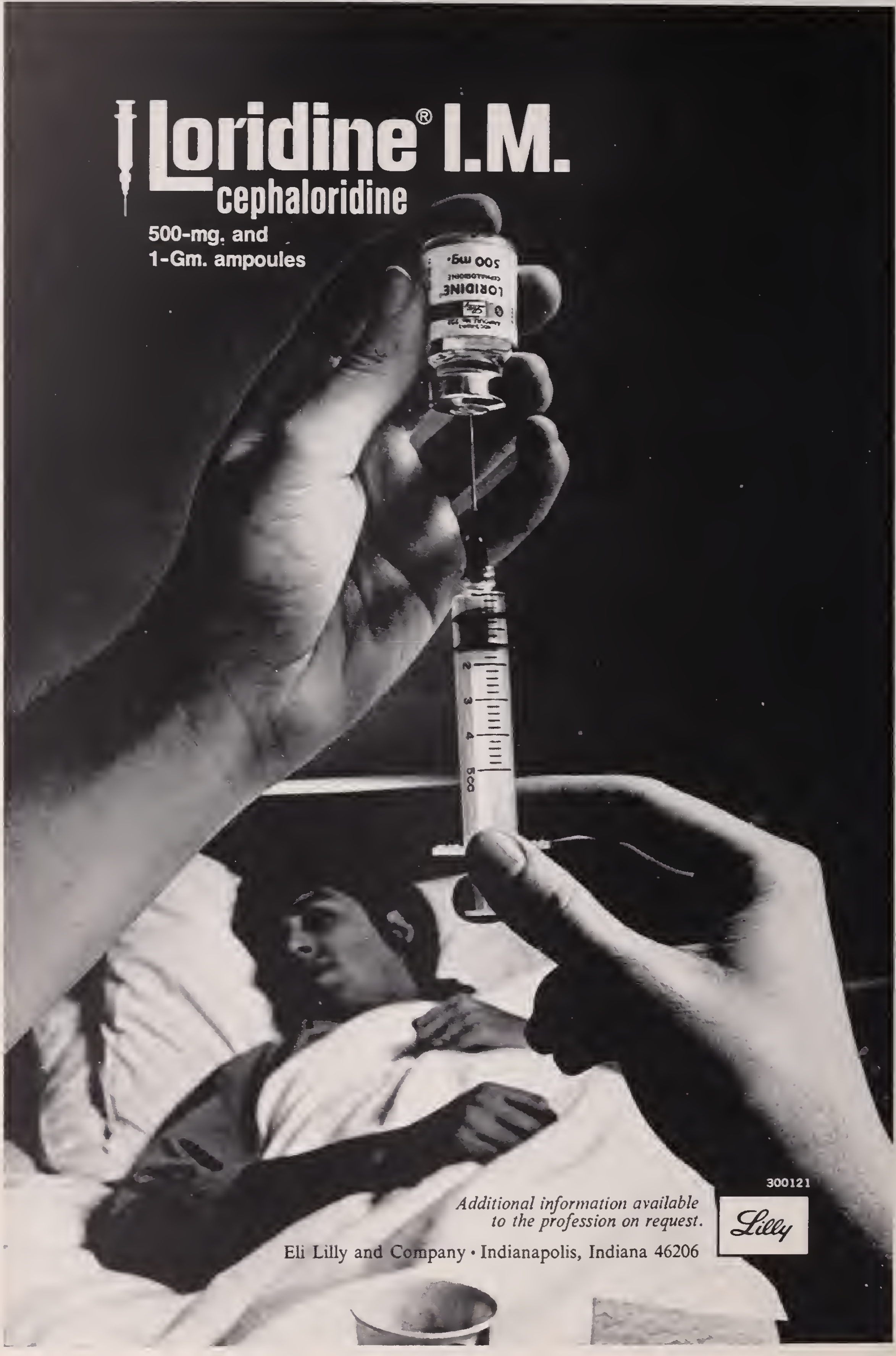
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Volume 70, Number 11—November, 1973

Missouri Medicine

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FULTON L. SAIER, M.D., VICTOR H. BAZZOLI, M.D.
and **FRANK OSTAPOWICZ, M.D.,** *St. Louis*

Complicated Case of Compound Presentation

Case Report

COMPOUND PRESENTATION, the prolapse of an extremity alongside the presenting part with both entering the pelvis simultaneously, is an uncommon condition occurring with a frequency of one in 1,581 deliveries (0.06%) of infants weighing more than 1,500 gm.[1] Compound presentation in which one or more feet prolapse alongside the presenting vertex is less common, occurring once in 7,068 to once in 10,631 labors.[2, 3] "Complete prolapse" in which the extremity lies in front of the presenting part occurs with even less frequency,[4] and prolapse of the umbilical cord occurs in approximately 17% of compound presentations.[2, 3] The case report presented is that of complete prolapse of both lower extremities and umbilical cord complicated by antenatal vaginal bleeding, severe anemia and absence of blood replacement. In the presence of these conditions, conservative management was adopted during the first stage of labor with subsequent vaginal delivery by breech extraction upon complete dilatation of the cervix.

CASE REPORT

The patient is a 20-year-old, gravida 4, para 3, black woman whose last menstrual period was on Aug. 1, 1971 and whose expected date of confinement was May 8, 1972. The patient was admitted to the Max C. Starkloff Memorial Hospital in St. Louis at 10 PM on March 27, 1972 with a ten-hour history of vaginal bleeding accompanied by the passage of clots. The patient gave a history compatible with rupture of the membranes four hours prior to admission and contractions began two and one half hours prior to admission, increasing in intensity to the time of admission.

The patient had received no prenatal care; to her knowledge, the pregnancy had been essentially unremarkable. The review of systems and past history are significant in that the patient had been informed in March, 1971 that she was anemic and had been treated with oral iron supplement. The patient was treated with antibiotics for a kidney infection in August, 1971. Her three previous pregnancies were unremarkable.

The physical examination revealed a temperature of 100.4 F, a pulse rate of 120 per minute and a blood pressure of 110/70 mmHg. In general, she was a well developed, well nourished, black woman in no acute distress. She was alert and well oriented. The conjunctiva were pale as well as were the nailbeds. The breasts, heart and lungs were essentially

Compound presentation involving complete prolapse of both feet and the umbilical cord is a rare condition in which cesarean section is the treatment of choice. Since this case was complicated by antepartal vaginal bleeding and severe anemia in the absence of blood replacement, it posed problems in both diagnosis and management. The authors are from the Department of Gynecology and Obstetrics, St. Louis University School of Medicine.

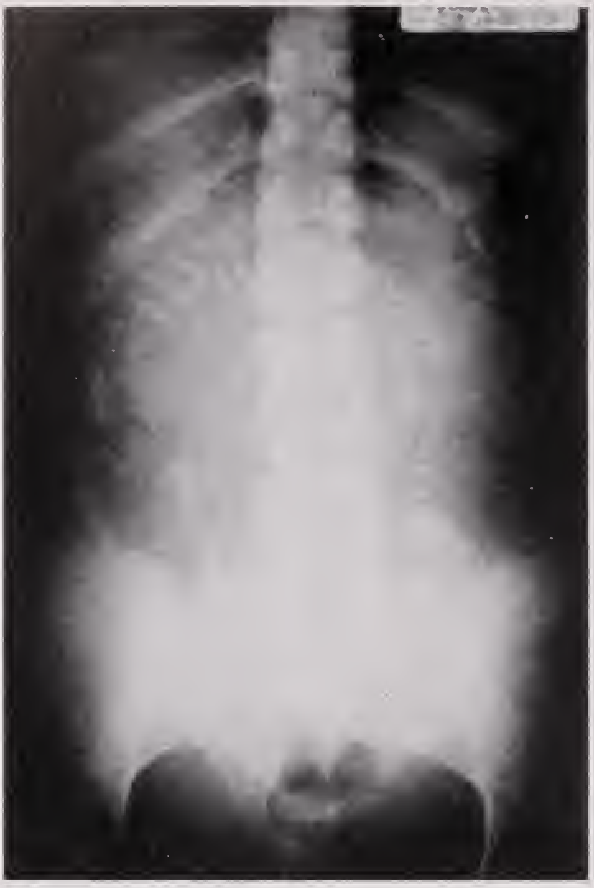

Fig. 1 Complete prolapse of both lower extremities.

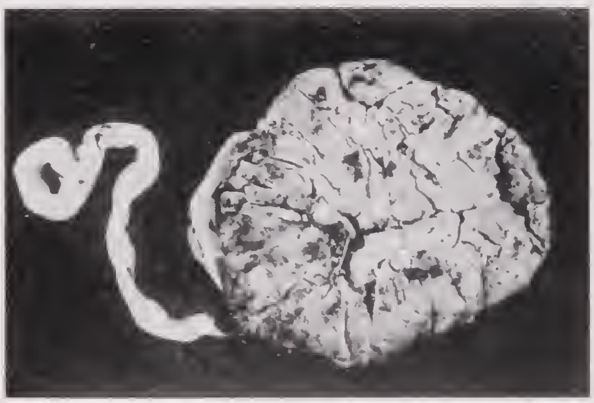

Fig. 2 Placenta with evidence of partial separation.

unremarkable. The abdomen was gravid with the MacDonald measuring 28 cm; the Leopold maneuvers were essentially noncontributory in identifying the lie of the fetus. The uterine tone was not increased and no tenderness was detected. The fetal head could not be palpated in the pelvis nor could the breech or fetal head be palpated in the upper quadrants. The fetal heart tones were audible in the LLQ just under the level of the umbilicus at 136 to 144 per minute. No edema or varicosities of the lower extremities were noted, and the neurological examination was essentially unremarkable.

On admission, the patient was having moderately strong contractions every three minutes with duration of about 60 seconds. The hematocrit value was 25%, and blood was obtained for type and crossmatch. The blood type was B negative and no compatible blood was available. Intravenous Lactated Ringer's solution was infused; blood pressure and fetal heart tones were monitored frequently and the patient's temperature was recorded hourly. The pediatrician was notified of the impending premature delivery.

X-ray examination (Fig. 1) at this time revealed a compound presentation of the fetus with complete prolapse of the feet in front of the presenting vertex. The fetal legs were extended, the breech was on the patient's right side and the upper extremities were flexed and not prolapsed alongside the vertex. The presenting parts were located within the pelvis and no evidence of a low lying placenta or placenta previa was noted.

Careful insertion of the speculum revealed the cervix to be approximately 3 cm dilated with the membranes immediately adjacent to the cervix. Digital examination confirmed the x-ray findings and revealed the membranes to be intact in contradistinction to admission history. Fetal small parts were palpable at a station minus two (-2). The fetal head was palpated above the fetal small parts and a pulsatile structure, which was identified as the umbilical cord, was palpable to the left of the fetal small parts.

The patient's vital signs and the fetal heart tones remained stable except for the previously noted maternal tachycardia. Her temperature returned to normal with hydration and Lactated Ringer's solution continued to be infused as compatible blood remained unavailable. Estimated blood loss during the three hours following admission was 800 ml. Contractions increased in intensity with subsequent cervical dilatation. Four and one half hours after admission, the cervix was noted to be completely dilated with the fetal small parts at a station minus one (-1). The fetal heart tones were audible at 186 per minute. A pudendal nerve block was performed, the feet were grasped and the membranes ruptured with the subsequent delivery of a 1,760 gm male infant by breech extraction. The Apgar score of the infant was three at one minute and seven at five minutes. Subcostal and substernal retractions were noted and the baby was transferred to the premature nursery.

The placenta revealed a partial abruption with a fine, shiny film over the maternal surface (Fig. 2). After delivery, the patient was transfused with two units of whole blood and the hematocrit value on the following morning was 24%. She was given a course of iron replacement therapy and was discharged to be observed in the outpatient clinic. The infant's postnatal course was essentially uncomplicated and he was discharged at 30 days of age at a weight of 2,400 gm.

DISCUSSION

Weissberg[1] describes a vertex-foot presentation without associated prolapse of the umbilical cord as a "major obstetric complication" usually requiring intervention. Compound presentation with associated prolapse of the umbilical cord is a condition in which fetal wastage is extremely high. Bhose,[5] in his review of 91 cases of compound presentation, noted that in the 25 cases with associated prolapse of the cord, 12 fetal deaths occurred prior to hospital admission. Bhose attributed 60% of all fetal deaths associated with compound presentation to prolapse and compression of the umbilical cord. Chan,[6] in his series of 65 cases, found a fetal mortality rate of 40% in cases associated with prolapse of the cord. He also noted an increased fetal mortality when the foot was prolapsed in contrast to the prolapse of the hand or arm alongside the vertex.

The case presented is complicated both from the diagnostic aspect and from the aspect of providing the management of choice. Associated with compound presentations are an increased incidence of both abruptio placenta and placenta previa[1, 8] as a source of antepartum bleeding, as well as increased incidence of prematurity.[8] The patient presented to the hospital in early labor with a history of antepartum bleeding and premature onset of labor. The premature status of the fetus as well as the vaginal bleeding were noted on admission, and the Leopold maneuvers were not contributory in determining the lie of the fetus. The uterine tone was normal and, consequently, significant placental separation was not suspected. The diagnosis of compound presentation was made by radiologic examination (Fig. 1). Because of the position of the presenting fetal parts and the absence of a low-lying soft tissue density, placenta previa was believed not to be present. A careful speculum examination revealed the membranes closely applied to the cervix. The digital examination confirmed that the membranes were intact and the diagnosis of compound presentation, as both feet and the pulsating umbilical cord were palpated in front of the presenting vertex. The prolapsed umbilical cord which was noted at the time of digital examination, was confirmed at the time of delivery.

The management of this case was influenced by the presence of severe anemia in the absence of blood for replacement and by the absence of the signs and symptoms of hypovolemic shock. The patient's hematocrit value on admission was 25%. With the continued vaginal bleeding, the estimated hematocrit value was 20%. Emergency cesarean section, the treatment of choice for prolapse of the umbilical cord during early labor,[6] was considered but was contraindicated by the patient's decreased hemoglobin level in the absence of available compatible blood.

A policy of "watchful expectancy"[7, 9] was adopted and supportive measures, which included intravenous replacement with lactated Ringer's solution, were instituted. Preparations were made for rapid extraction of the infant should this be necessitated by rupture of the membranes with subsequent compression of the umbilical cord. Labor proceeded uneventfully with the membranes remaining intact until complete dilatation, at which time a pudendal nerve block was given. The membranes were artificially ruptured and the infant was delivered by breech extraction.

Prematurity associated with compound presentation is a major cause of fetal loss[7] and, most probably, this was a significant factor in the neonatal morbidity associated with this case. The infant's birth weight was 1,760 gm, and severe retractions were noted soon after birth. Intensive care in the premature nursery was available, and the infant responded well to supportive oxygen therapy.

The diagnosis of compound presentation was made radiologically early in the course of the patient's labor and while the membranes were intact. Close fetal monitoring and watchful waiting without obstetric interference was employed and labor proceeded satisfactorily. The complications of uterine inertia, dyskinetic or tetantic uterine contractions, which are so frequently reported with compound presentations,[4] were not encountered.

Replacement of the fetal extremities was not attempted because of their complete prolapse, because of the abnormal lie of the fetus and because of the close proximity of the pulsating umbilical cord. In view of the multiple complicating factors in this case, which were compounded by the unavailability of compatible blood, the more obvious solution of cesarean section was not applied. Conservative management with subsequent breech extraction was successfully employed for the delivery of a live infant. However, it is stressed that when "watchful waiting" is the plan being followed in a situation of this type, continuous evaluation of the patient is required and facilities for immediate cesarean section must be available.

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EMILIO M. CANLAS, M.D. *and*
M. MORGAN, M.D., *Poplar Bluff*

Radiologic Sequence From Esophagitis To Carcinoma

Case Report

A 73-year-old man was admitted to the hospital with a history of difficulty with swallowing, which he had experienced during the preceding 30 years. He claimed that during this period, he had learned to swallow air in order to push food into his stomach. However, he had not been seen by a physician until about seven years previously when he had gone to a private physician with a complaint of sour stomach and substernal soreness. He was given antacids which provided some relief.

He was first seen at this hospital on Dec. 21, 1965, again with the chief complaint of substernal chest pain and sour stomach. He claimed that taking a teaspoon of baking soda dissolved in water relieved the discomfort. He had no history of vomiting or regurgitation. The first esophagogram, which was made at this hospital on Dec. 28, 1965, showed narrowing of the distal third with ulceration (Fig. 1). A repeat esophagogram made in February, 1966, showed constriction of the lumen of the distal third,

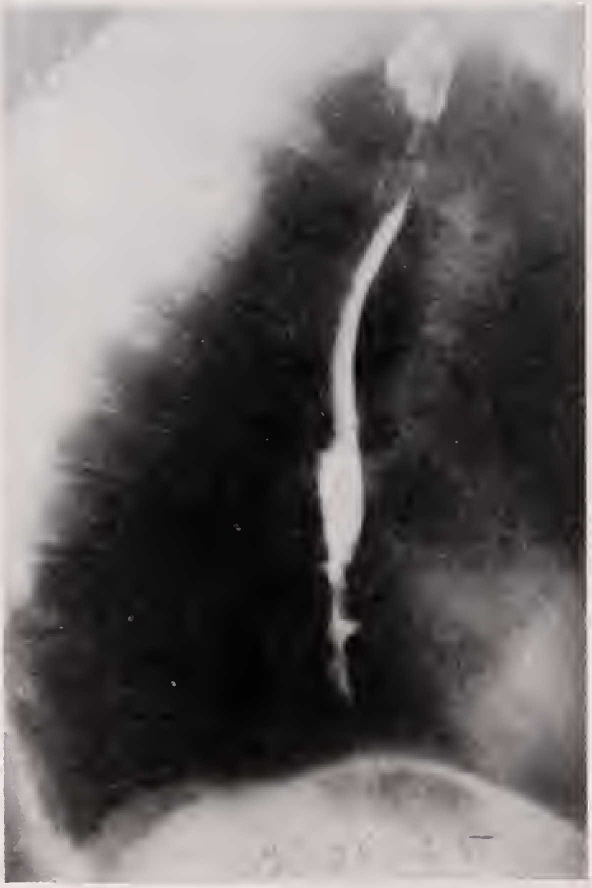

Fig. 1 (Dec. 28, 1965) Esophagogram shows two ulcers in the distal third with constant narrowing of the lumen. Moderate dilatation is seen proximal to this narrow segment.

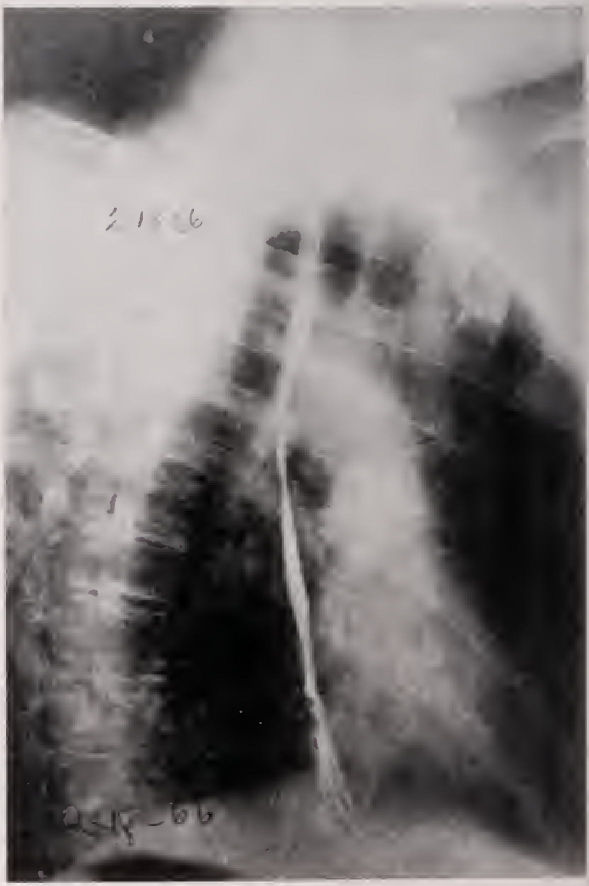

Fig. 2 (Dec. 18, 1966) Repeat esophagogram after one year shows absence of ulceration and entire esophageal lumen patent. No delay in the passage contrast medium into the stomach.

but no ulceration. No tumor was seen (Fig. 2). In January, 1969, esophagoscopy with biopsy was performed and showed acute and chronic esophagitis.

The patient was lost to follow-up and was not seen again until November, 1969. At that time, his main complaint was hematemesis of approximately 200 cc about an hour before admission. The patient stated that he continued to swallow air in order to push down each bolus of food.

Physical examination was essentially negative, except for minimal tenderness in the epigastrium. An esophagogram on Nov. 11, 1969, showed narrowing of the distal third with no ulcer or tumor (Fig. 3). Three weeks later, the patient was discharged to the care of his physician.

On March 23, 1971, after a 2- to 3-months period of worsening difficulty with swallowing, he was readmitted. During the two weeks before admission, the patient had taken only liquids by mouth and had experienced occasional regurgitation. He was ambulatory and appeared well for his age. On March 24, 1971, an esophagogram showed no ulcer or tumor, but narrowing of the distal third (Fig. 4). On March 25, 1971, esophagoscopy showed a marked stenosis at the lower third of the esophagus approximately 6 cm above the esophagogastric junction. The mucosa in this area was not seen clearly, but it appeared to be irregular. Several biopsies of the mucosa were taken, and these showed adenocarcinoma.

This case report illustrates that a malignant tumor may appear in chronic esophagitis and may be difficult to diagnose. Dr. Canlas is in the private practice of radiology and Dr. Morgan is Chief Surgeon, VA Hospital.

On April 1, 1971, an esophago-gastrectomy was performed. Inspection of the lesion showed 3 cm of normal-appearing mucosa between the lesion and the esophagogastic junction. Histologic studies of the intervening mucosa and section of the cardiac portion of the stomach failed to reveal any tumor. It was felt by the pathologist therefore, that the tumor arose in ectopic gastric mucosa in the lower portion of the esophagus.

The postoperative course was complicated by a

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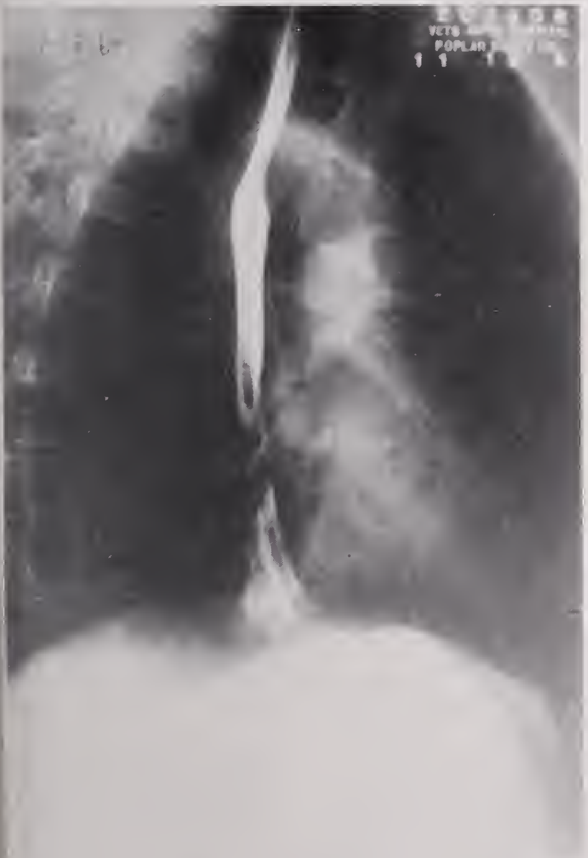

Fig. 3 (Nov. 18, 1969) Repeat esophagogram after three years shows narrowing distal third but no ulceration or tumor.

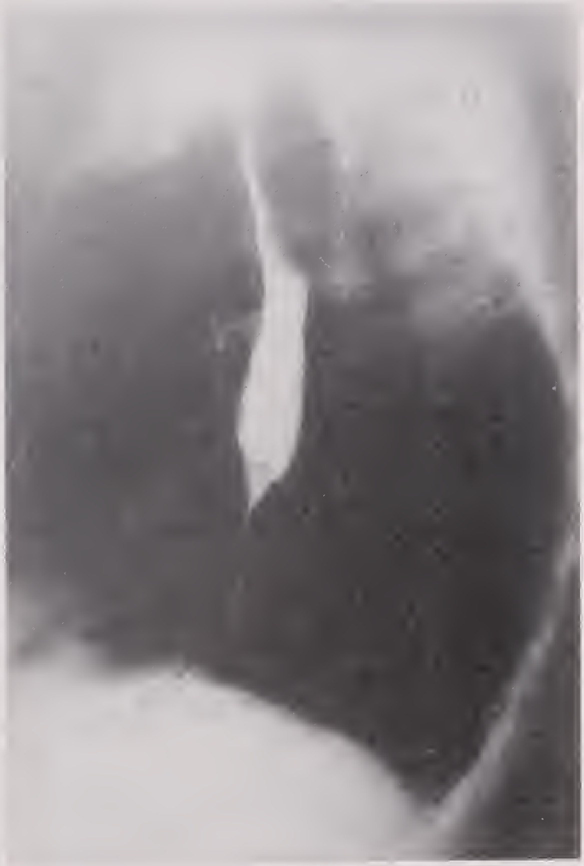

Fig. 4 (March 24, 1971) Repeat esophagogram after five years shows markedly narrow lumen, distal third and radiolucent area immediately above the narrow segment. Esophagoscopy was recommended for possible malignant tumor.

LARRY E. MILLIKAN, M.D., ***Columbia***

Wiskott Aldrich Syndrome: A Treatable Immune Disorder

A Review

In the past three years, the impressive therapeutic advances with transfer factor in the Wiskott Aldrich Syndrome make its clinical separation from other look-alikes important. Since its first description in 1937, by Wiskott,[1] more than 125 patients have been described in the literature. Aldrich, in 1954, first determined its x-linked nature.[2]

The classical triad of Wiskott Aldrich consists of eczema, thrombocytopenia and increased susceptibility of infections.[3, 4] The majority of patients, who were included in earlier reports of the syndrome, manifested all three. More recently, however, other patients have been included who do not manifest all three disorders and who do have other defects.

Pathogenesis

Examination of the eczema component alone doesn't furnish evidence for the separation of ordinary patients with atopic eczema from those with Wiskott Aldrich Syndrome,[5] although precise reports of response to therapy or other clinical details are few.

The inherited immune defect has been the subject of much research in the past five years. With this impetus, much has been learned of the underlying mechanisms. There is no single immunologic abnormality common to all patients with Wiskott Aldrich Syndrome. Three general terms, dysgammaglobulinemia, diminished cellular immunity and decreased isoagglutinins, perhaps best cover the abnormalities. Dysgammaglobulinemia is the preferred term, for while the IgM abnormality is almost universal,[6] variable changes in the other immunoglobulins are usually present. Elevations of all immunoglobulins have been described as well as elevations only of IgA[7] and elevations of both IgA and IgE.[8] The isoagglutinin deficiency is the most common abnormality and so is easily used as a screening test.[9] The abnormality of cellular immunity has long been suspected because of the types of infections. Abnormal lymphocyte transformation was first described by Gottoff in 1968.[10] Structural abnormalities of the thymus were previously described in 1967.[6] Cooper also noted a diminished response to Dinitrofluorobenzene (DNFB) sensitization and an abnormal homograph rejection.[10]

A single unifying hypothesis to explain this peculiar mosaic of immunoglobulin abnormalities and deficiencies in delayed hypersensitivity has not been devised. One approach was to explain this defect as an abnormality in the immunoglobulin sequence after antigen exposure. This hypothesis was initially based on the finding of decreased IgM. Because IgM is the dominant primary immunoglobulin, diminished macroglobulins could result from an abnormality in either the primary response or the processing step.[11] This abnormality would then cause abnormal accumulation of the antigen or infecting organism which would progress to persistent antigenemia antigen overloading. This can give the changes in delayed hypersensitivity and immunoglobulins. The differentiation between congenital or acquired thymic abnormalities is made by careful evaluation of the thymus on autopsy. The presence of Hassall's corpuscles is thought by most investigators to indicate intact congenital delayed hypersensitivity. Atrophy of the thymus can occur as the result of steroid therapy or chronic infection, but persistence of the Hassall's corpuscles is seen. Unfortunately, most of the patients who were examined in the past did not have a careful examination of the thymus.

A variation of the immunoglobulin sequence theory is the ingenious work of Cooper and Good.[10] They studied several patients with multiple antigens and were able to determine that the defect was related to the afferent limb of immunity. Their patients were unable to respond to certain polysaccharide antigens which required processing in the induction of immunity. These included the Forssmann antigen, blood group antigens, the Witebsky substances A or B and endotoxin. Most interestingly, these patients responded normally to protein antigens in most cases. They concluded that there was difficulty in the processing step which leads to the inability to handle certain antigens, antigen overload and a secondary functional deficiency of the thymus dependent lymphoid system. The effects of endotoxin are known and the end result would be lymphoreticulo-malfunction, decreased thymic dependent activity, decreased IgM and lymphocytopenia. Recent work done at the National Institutes of Health[12] has further elucidated the immunoglobulin abnormalities. The majority of patients had normal IgG levels, diminished IgM levels and increased amounts of IgA, IgD and IgE. Studies showed that IgG was turned over five times as fast as normal and there was a twice normal turnover for IgA, IgM and albumin. Turnover was not related to the GI loss since there was only a 2% increase in GI loss of immunoglobulins. The exact mechanism of the hypercatabolism was thought to be related to increased activity of the reticuloendothelial system.

Studies into the delayed limb of the immunity of these patients was done by the same group.[13] In their patients, they found that in many of the cases, there was increased spontaneous lymphocyte transformation in control cultures. Phytohemagglutinin response was largely normal and this parallels two other conditions with a generalized specific anergy associated with intact nonspecific PHA response. These are chronic mucocutaneous candidiasis and progressive lymphoid deterioration. They speculated that the basic lesion was defective antigen binding site on the lymphocyte surface. This, of course, could involve both the humoral and the delayed hypersensitivity limbs and lead to defective response to specific antigens. The defect could still be in the processing step delineated by Cooper, for the primary antigen processing is necessary for both delayed and immediate hypersensitivity reactions.

The platelet abnormality has received the most attention on the basis of various types of therapy. More recently, progress has been made n determining the exact metabolic problem in the platelets. In 1966, it was first noted that homologous platelets had normal survival in Wiskott Aldrich patients and that only autologous platelets had decreased survival rates.[14] This helps separate this problem from such immune problems as idiopathic thrombocytopenia purpura. More recently, evaluation of the platelet, itself, with many sophisticated techniques has been done. Reports have described abnormal responses[15] of platelets to epinephrine, and these suggest that the defect may be in intracellular granule formation of the platelet. These granules seem to lack specific regulators of the Krebs cycle, the energy source for the platelet degranulation and aggregation. An alternate explanation[16] presented is that there are defects in production of specific storage granules. Platelet size has been a subject of recent interest and patients with various thrombocytopenic states have been studied. Young platelets are generally larger in size, and this is the case in idiopathic thrombocytopenia purpura. The platelets in Wiskott Aldrich Syndrome have been reported to be a small size. This is of interest and is being studied further. The platelets in Wiskott Aldrich Syndrome are presently thought to be a young platelet population with a much shortened platelet survival. The small size of these platelets may point out an intrinsic defect not yet discovered.

Previously considered rare, the Wiskott Aldrich Syndrome is being recognized more commonly and has assumed importance because of new advances in therapy of the immunologic abnormalities. The current understanding of the hematologic and immunologic defects is presented. With the current therapeutic success using grafts and transfer factor, separation of the disorder from other diseases with eczema is necessary. Dr. Millikan is Associate Professor, Division of Dermatology, University of Missouri Medical Center.

The susceptibility to infection most commonly includes otitis media and some upper respiratory infections. Splenectomy, which is done for the thrombocytopenia, has contributed to the death of many of these patients. Presumably, this is related to both the immunologic defect and the loss of the filtering capability of the spleen. With the cellular immune defect, more serious infections can be expected to appear. Herpes simplex[17] and other viral infections and protozoan infections have been reported.[18]

About 150 patients with the full syndrome have been described. Many other patients with variations of this syndrome have been seen and their reports are appearing in the literature. Patients have been described with the platelet abnormality and decreased isoagglutinins but without increased susceptibility to infection. In addition, the platelet abnormality and eczema without immunodeficiency also has been described.[19] We have taken care of a kindred, two young men and their two nephews who had recurrent infections, thrombocytopenia but minimal if any skin changes. A similar kindred has been reported who had thrombocytopenia, decreased isoagglutinins without eczema or increased infections.[20] With this wide variation in manifestation of the syndrome, patients with partial expression having milder disease and longer life span[21] are recognized more often. Therapy also may be helpful in these patients and so their identification is of value.

Therapy

The primary causes of death in these patients are hemorrhage and infection. In the early 1960s, the first efforts were made to improve the survival of these patients by treating the thrombocytopenia. Platelet transfusions are used in mild cases, but splenectomy often is necessary in many of these patients.[22] This, however, is not without problems. In the literature, many of these patients have succumbed to infection after the removal of the spleen.[23] According to Mandl,[20] splenectomy is contraindicated in almost every case of Wiskott Aldrich because of the susceptibility to infection and the loss of the spleen as an important screening element in the reticuloendothelial system. At the present time, patients are still being treated by splenectomy and some have done very well. To our knowledge, the controversy has not been resolved and replacement therapy with platelet transfusions is still the safest therapy.

Attempts at improving the immune response began with simple plasma infusions.[11] These, of course, did help the patient to some extent. Transplant therapy was introduced by Bach[24] with the use of bone marrow transplant. The donor was the patient's sister, who was identical at the HLA locus. This patient responded well and developed the chimeric state in the peripheral blood with both male and female cells present. Other tissue transplants have been attempted, but the current exciting therapy involves the use of transfer factor. Transfer factor is a low molecular weight nonsensitizing dialyzable substance first described by Lawrence,[25] which recently has gained widespread acceptance and use in laboratories throughout the country. Evidence has been accumulated that eczema is related to defects in delayed hypersensitivity.[26] Therefore, it is not surprising that the patients who have some abnormalities of cellular immunity, susceptibility to infection and eczema, as in Wiskott Aldrich, might respond to transfer immunity. Spitler first described initial studies in abstract form in 1970. However, her work is fully described now in the recent publication.[27] The results in her patients with the Wiskott Aldrich Syndrome are extremely interesting. Clinical improvements with a marked decrease in infection and clearing of eczema was noted in seven of 12 patients treated. In vitro studies after transfer factor therapy showed no change in lymphocyte blast transformation, but it did show an increased production of migration inhibitory factor (MIF) in response to appropriate antigens showing partial recovery of cellular immunity. Abnormalities of monocyte IgG receptors were found in those patients who responded to the transfer factor. This gives a clue as to the mechanism of the response and seems to confirm previous speculations.[13] Transfer factor appears to affect membrane functioning and, thus far, works only on those patients with defective IgG receptors.

Because a new means of therapy is available, it is important to reevaluate all patients with an eczema or other portions of the syndrome to determine if they have the Wiskott Aldrich Syndrome. Those who have sufficient disability should be considered for possible transfer factor therapy. This therapy, thus far, in our hands[28] and others[29] seems to have minimal problems. The dramatic response of Spitler's patients gives hope for many patients with this serious disorder.

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Reprints: Larry E. Millikan, M.D.
University of Missouri
N 119 Medical Center
Columbia, Mo. 65201

Compound Presentation

(Continued from page 761)

SUMMARY

A report of a complicated case of compound presentation involving complete prolapse of both feet and umbilical cord, as well as antenatal vaginal bleeding, prematurity and severe anemia in the absence of blood replacement, has been presented. X-ray examination revealed the presence of a compound presentation and provided evidence against the presence of a low lying placenta allowing for further careful evaluation. Although the diagnosis of prolapse of the cord was made early in labor, cesarean section was contraindicated by the unavailability of compatible blood. A policy of watchful expectancy was employed and was followed by vaginal delivery via breech extraction upon complete dilatation of the cervix.

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Reprints: Fulton L. Saier, M.D.
4146-A Minnesota
St. Louis, Mo. 63118

Esophagitis to Carcinoma

(Continued from page 763)

left femoral embolus, which was successfully treated by embolectomy. The patient recovered from the operation well, has been eating a regular diet and has gained five pounds.

SUMMARY

A case report of dysphagia of over 30 years duration is presented. During the last five years, it was diagnosed as chronic esophagitis by X-ray, esophagoscopy and biopsy. X-ray findings were typical of esophagitis, with narrowing of the distal third, gradually merging into normal esophagus. Later, an esophagogram showed a small radiolucent area in the proximal end of the narrow segment, and esophagoscopy was recommended for possible malignant tumor. Biopsy showed adenocarcinoma.

A malignant tumor may appear in chronic esophagitis and may be difficult to diagnose. The role of prolonged chronic irritation in the initiation of the carcinoma is open to speculation.

JAMES L. CHAPEL, M.D., ***Columbia***

The Hyperactive Child

Every neighborhood and almost every grade school classroom has an irritating and difficult child who is the curse and the despair of the adults who come into daily contact with him. This child presents the same sort of picture to the other adults that he does to the teacher, except that his teacher's lot is worse than the casual neighbor's. The teacher must deal with him from three to six hours a day, five days a week, for nine long months of the year while he is living for the day when this boy will graduate to the next class. Alas, more often than not, the boy is replaced by another "little monster" of the same vintage, same problem, but different name.

In discussions, this child is called a "problem child," "anti-social," "a disrupter" and, at times after a more than usually trying day, names which more properly belong in a zoo or in a kennel. He is the hyperactive, impulse-driven, easily frustrated child who has a knack for "getting into everyone's hair" and who, it is said, "should know better," "is able to do better if only he wanted to" or "if he would try." Eventually, through pressure from the school (or if the child is too young for school, then pressure from the neighborhood), the child finds his way to the physician's office, being tugged grimly by the hand by a mother who is both emotionally and physically exhausted. It then becomes the physician's task to diagnose this child's problem and offer concrete help to the parents and other significant people in this child's life.

Medically, it should be appreciated that this child could be showing the results of any one of the following:

1. A normal but high activity level.
2. Minimal brain damage (cerebral dysfunction).
3. An emotional reaction to a variety of stimuli which may be either internal or external or both.

The problem of differential diagnosis is difficult at times; at other times (but, fortunately, rarely), it is almost impossible. In the following discussion, I will present my impressions of this particular problem and outline the steps which I feel one ought to consider in attempting to arrive at a definite diagnosis and sound treatment plan. In order to do this, I will present in detail the findings which one most commonly meets in the brain-damaged child. From that, it will be appreciated how one might make the differential diagnosis.

The syndrome of "Minimal Brain Damage" is known by many and various names, depending on the discipline which is attempting to deal with the syndrome at that particular moment, e.g., "maturational lag, minimal brain dysfunction, neurophrenia, impulse-driven child, hyperkinetic child, brain injured child" and others. From the medical viewpoint, it is important to realize that there are many and varied clinical types of brain-damaged children, ranging from those with gross cerebral palsy at one end of the spectrum to children whose brain damage shows no discernible clinical signs whatever.[1] In this spectrum ranging then from severe to apparently normal, the syndrome of the "brain-damaged child" to which we are referring falls to the right of center or towards "apparently normal." When this child is referred to the physician, he is referred primarily because of his behavior and not because of neurological involvements. He may well present with a multitude of "soft signs" of central nervous system involvement or he may show only a few inconclusive but suggestive signs. In these cases, consequently, one has to base his diagnosis on the correlation of the clinical picture with the history and investigative findings, although even this method at times will fail to definitely resolve the question. The age of the patient also is of little help, since the behavior manifestations may appear at any time in childhood from infancy to early adolescence, but more commonly between five to ten years of age.

The following outlines the more important areas which have to be explored in order to arrive at the diagnosis of brain damage:

A. Clinical picture.
B. Social adjustment history—peer and teacher relationships, family interactions, learning

skills, school behavior, etc.

C. Psychological and other tests—WISC, Bender, Benton, Graham-Kendall, ITPA, speech and educational evaluation, etc.

D. Medical history—prenatal, natal, growth and development.

E. Physical and neurological examination—"soft signs," EEG.

In my experience, I have felt that a positive ABC, i.e., a positive clinical picture plus a typical social maladjustment history plus psychological tests compatible with brain damage, are together proof enough to establish a diagnosis in virtually all cases. The other areas of investigation (D,E) can add to the probability of the diagnosis. When negative, however, they still do not significantly detract from making the diagnosis.

A "normal but high activity level" diagnosis may be made when the examinations are negative and there are no learning difficulties except those which may be directly attributed to hyperactivity or restlessness. In these cases as well, one will find that the child has a normal attention span, is not abnormally distractible and has good impulse control. Really, to all intents and purposes, he is quite normal except that "he is more boy than the average." Of course, the important factor here is the recognition of this boy's different temperament and the management instituted in line with this knowledge.

An "hyperactive child due to emotional factors" diagnosis also can be made on the absence of positive findings in C, D and E, but in the social history (B), there are very definite indications of internal stresses (anxieties, insecurities, fears and others) as well as pathological external and environmental factors (rejecting parents, intense sibling rivalry and others).

In making the diagnosis of the "minimally brain-damaged child," the five broad areas of nvestigation mentioned above can be further detailed as follows:

A. Clinical Picture

The child is more often a boy (six boys to one girl is often quoted as an average figure) who s invariably prepubertal and with the age group ive to ten years showing most dramatically the igns and symptoms characteristic of this syndrome. The cardinal signs are hyperactivity, impulsivity, distractibility, short attention span and ow frustration level, all of which are present in varying intensity depending on the severity and ocation of the brain injury, the age of the child, the nature of the examination's setting, etc. The child is restless, moves from one situation to another and is unable to sit quietly for any time. The slightest noise in the external environment commands his attention; the slightest distraction forces him to look. He is impulsive in his play with objects or with persons and unable to concentrate on any task for any significant length of time. Often, his speech reflects a parallel hyperactivity and distractibility in his thinking and one finds oneself amazed at the close similarity between his motor and verbal patterns. At times, the child definitely gives the unsophisticated interviewer the impression that this hyperactivity is nothing more than the behavior seen in a spoiled, untrained child and the urge is strong to lay one's "healing hands" where "it will do most good." The child may well rummage through your desk, play with your instruments, get into your stock of sample medications and literally destroy the effectiveness of your long years of "insight training." If ever the strong urge to discipline a very restless boy arises within you as you interview a child, I would venture to say that chances are you are dealing with a hyperactive, brain-damaged child.

The syndrome of the hyperkinetic child, regardless of etiology, is a real and trying condition for all who are associated with the victim. The author presents his impressions of this problem and outlines steps to consider in attempting to arrive at a definite diagnosis and sound treatment plan. Dr. Chapel is Professor and Chief of Child Psychiatry in the Department of Psychiatry, University of Missouri-Columbia.

B. Social Adjustment History

The history of adjustment in the home and in the community is that of a poor adjustment, indeed. In the neighborhood, the boy is always "on the go," always doing something to someone and always getting into some sort of mischief. He tends to have very few, if any, friends because of his tendency to be destructive and impulsive and to act without showing good sense. His judgment is poor and his behavior is unpredictable. In fact, at times, he is cruel and seemingly unfeeling. As he gets older, he may be aggressive, irritable, high strung, easily panicked, unpredictable and, at times, quite explosive in his emotional outbursts. There may be emotional lability, destructiveness, cruelty to people and animals. The lack-of-impulse control makes him unable to refrain from touching and handling objects regardless of how "out of bounds" they might be, whether at home or in a strange place. In fact, the stranger the setting, the more stimulating it is to him and, therefore, the more difficult it is to resist. This impulsivity leads him into conflict with the demands for conformity as established by family, school and the immediate and not-so-immediate society. Often, the brain-damaged child will attempt to make contact with people by clinging or overaffectionate behavior or by attention seeking or even abusiveness, but much of the activity is impulsive, poorly controlled and disorganized. If his interest is keenly aroused, however, he can show good attention span. The parents, faced with daily evidence of their ineffective management of this boy, react with anger, guilt, depression and helplessness. All of this tends to make their inadequacies much worse and leads to a vicious, self-perpetuating cycle only broken when treatment is begun. The child himself, who is an unthinking, impulsive, destructive and often antisocial being, sees himself falling behind in school and being rejected or shunned socially. Hence, he develops poor self concepts, lacks confidence, feels inadequate and insecure and reacts with bitter hostility towards his world. They are most often unwanted by others and they know it.

In school, the boy can present a variety of pictures and he is described by the teachers or those who come into contact with him as a child who has any of the following:

No sit in him.
Can't be screwed to his seat.
He seems bright, but he daydreams and can't read.
He is high strung and nervous.
He does not work to capacity.
He has frequent temper outbursts, often without reason.
He cries often and easily.
He is an attention seeker.
He is often stubborn and uncooperative.
He has constant difficulty with the other children and with adults.
He is unhappy, aggressive and unrealistic in his demands.
His daydreaming alternates with his hyperactivity.
He lacks continuity of effort and perserverance or stick-to-it-ness.
He may have unpredictable, explosive behavior.
He has poor self-control and is very impulsive verbally.
His school performance is erratic.
The quality of his work varies daily.
He appears unable to differentiate important from unimportant stimuli, i.e., a car horn is as important as the teacher's voice.
He often shows learning disabilities, e.g., he shows confusion in spelling, in writing (reversals of letters, mirror writing, rotation of symbols).
He is poor in arithmetic, can't read, has poor memory.

Further terms used to describe this boy would include "poor reader, poor ability to conceptualize and to abstract, difficulty in reasoning out logically or to arrive at the meat of the matter, classroom comments often inappropriate, answers often concrete." A rather common trademark of this boy is a poor, scrawly, irregular, often illegible handwriting with frequent reversals, rotations and a very clear inability to stay between the lines. There is often difficulty in drawing angles, diamonds or reproducing geometric figures which have special spatial relationships.

The most frequent and most frustrating behavior of the typical brain-damaged child is that of his hyperactivity which, along with his very short attention span, tends to lead him to distract the remainder of the class and be completely disruptive of classroom discipline.

At times, this child's inability to concentrate or to assimilate the material presented to him causes him to become retarded educationally and eventually to be banished to the special education classes where it is apparent that his intelligence is better than most of his peers but his ability to use that intelligence actually is poorer.

Finally, this boy seems to exhibit a fluctation of mood with aggressive outbursts often coupled with poor judgment and impulsive behavior. He lacks fear, shyness and ambition and has an unfortunate inability to delay gratification or to profit from experience.

In summary, then, performance in school may show extreme variability, especially in spelling, arithmetic and reading. These children are impulsive in answering questions and act without thinking, thus giving a good example of the absence of reflection between impulse and action.

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Their handwriting often is poor with rotation and reversals and one may see them holding the pencil awkwardly or even in the palm of the hand. They are very distractible in their thinking and in their speech as well as in their attention. Motor restlessness is very much akin to the "thinking restlessness." There definitely is a low tolerance for frustration with the child giving up easily or getting angry when unable to master a problem. Attention span or ability to concentrate is often quite inadequate (this, perhaps, being a function of his high distractibility and acute consciousness of background stimulus). Such a child appears to be as stimulated by background extraneous noises or sights as he is by the task at hand. Hence, he can't concentrate on any task unless most other stimuli are removed.

Impulse control is defective and this also is manifested in thinking (they say what comes to mind) and speech (they speak without taking time to really formulate or think out the answer). It is as if they get the first two or three words of an answer in mind and start speaking, depending on the rest of the sentence to spontaneously appear. They can't wait to get started on a test, although they know they can't start before the others, and are often finished first because they can't stop to reflect or delay.

C. Psychological Testing

Psychological tests, done under controlled conditions by an experienced examiner, can prove to be highly helpful in the differential diagnosis of this condition. There are many proven tests such as the Bender-Gestalt, Benton Visual Retention Test, the Graham-Kendall Test and the Weschler Intelligence Scale (WISC) for Children. All but the WISC are tests which measure visual motor integrity and are often referred to as "very sensitive neurological tests." The WISC on the other hand is primarily an instrument to measure intelligence. Through experience with this test, however, it has become quite clear to some clinicians that it is a very sensitive indicator of brain damage. According to Clements and Peters,[2] there are three principal patterns which are suggestive for brain damage. The most frequent pattern is scatter in either or both of the Verbal or Performance scales with low scores occurring most frequently in arithmetic and digit span of the Verbal scale, as well as block design, object assembly, coding and mazes in the Performance scale. In this pattern, the verbal and performance intelligence quotient (IQ) scores turn out nearly equal. The second most frequent WISC pattern is that in which the verbal IQ is more than 15 points higher than the performance IQ. The third and least frequent pattern is that which sees the performance IQ being 15 points or more higher than the verbal IQ. This last mentioned pattern should immediately suggest dyslexia to the examiner except in those grossly underprivileged and culturally deprived children who have had very little verbal stimulation.

The tests for organicity (for example, Bender Visual-Motor Gestalt Test) when positive for brain damage may demonstrate such errors as rotation, difficulty in spatial arrangements, reversals, "dog ears," and others. In addition, the writing is often poorly executed, showing a variation in size of the letters, a tendency to project out of the lines and, in many cases, almost illegibility. In the younger school age child (ten years or under), there is often difficulty in reproducing geometric designs (circles, squares, triangles, diamond circle and diamond opposed).

In summary, then, it might be said that one of the better tools for diagnosis of cerebral dysfunction is the WISC which can, if interpreted correctly, add much weight "for-or-against" organicity. The tests for organicity, such as the Bender-Gestalt, also are of great help. On the other hand, there are studies that may tend to indicate that the WISC is totally unreliable in helping diagnose minimal brain damage. An example of these studies is one done by Rowley[3] in which he compared the WISC performance of brain-damaged and emotionally disturbed children and concluded that "when overall level of performance is controlled, examination of the pattern of WISC performance does not provide a basis for differentiating nondefective brain-damaged children from nondefective emotionally disturbed children." Nevertheless, there are definite patterns in the subtests of the WISC which strongly suggest brain dysfunction and these are scatter in either or both verbal and performance.

Other tests which may lend support to the diagnosis of brain damage might include the findings of dyslexia, acalculia, aphasia or difficulty in abstracting (which, incidentally, seems to be the hallmark of the brain damaged child). There are different degrees of abstract behavior, ranging from very good to poor, and the extent of the loss may vary with the amount of damage. However, it is felt that abstract capacity (symbol function) is the most complex function of the brain and, therefore, suffers first in cortical damage.

D. Medical History

This part of the investigation is oriented towards uncovering facts which could be related to or which could have contributed to brain damage. One examines the gestation period, the labor and the postnatal growth and development.

Items such as maternal infections (for example, German measles, mumps), toxemia, bleeding, premature rupture of membranes, foul-smelling amniotic fluid and others can be significant. Placenta previa, abruptio placenta, traumatic instrument delivery and cephalo-pelvic disproportions are all looked for. Fetal anoxia, prematurity, intracranial bleeding, maternal-infant blood incompatibility and kernicterus can all play a role.

A thorough history usually reveals that these children have some important differences in their developmental histories. They often are fussy eaters, show food idiosyncrasies and are prone to fussing and crying. They may be restless or excessively active in their cribs, show inability to tolerate fondling or caressing and be generally irritable and tense. The child may be hypertonic and be made more unhappy when picked up for comforting. On the other hand, early childhood could be quite normal. As the child gets older he seems to run rather than walk, stumbles more often than the neighbor's child of the same age and shows a tendency to be accident prone. He may be poorly coordinated at play, slow to ride a bicycle and "all thumbs" when it comes to catching a ball, throwing a stick or in other skills. He is slow in learning to tie his shoe laces, do up his shirt buttons ar perform other tasks which require good function of the finger muscles.

Pasamanick,[4] in epidemiological studies of prenatal factors, found that five clinical entities in children were found to be significantly associated with complications of pregnancy and prematurity. These were cerebral palsy, epilepsy, mental deficiency, reading disabilities and behavior disorders. He also found that significantly more of the prematures exhibited the syndrome of minimal damage.

E. Physical and Neurological Examination

Physical examination is notable for the absence of serious abnormalities. One often finds associated strabismus and minor speech defects which may consist of poor articulation or immature speech development. It should be noted, however, that no specific finding is invariably associated with this diagnosis.

Neurologically, more often than not one will find the "soft signs" which have become associated with the minimally brain-damaged child. Perhaps it may be simpler to list those findings:

Mixed dominance—For example, right eye dominant, left hand and left foot dominant.
Poor recognition of right and left sides (confused laterality).
Poor hand-finger coordination.
General motor awkwardness, e.g., difficulty in walking a straight line, throwing or catching a ball or manipulating objects.
Gait may be awkward and hopping on one leg rather unwieldy.
Walking on heels or toes is unsteady.
Simultaneously alternating rotation of wrists is grossly uncoordinated.
A rather striking inability to handle a pencil or other small objects with gentleness and precision. This lack of gentleness is even manifested when laying down these objects.

Physically, the boy is often lean and wiry and his head size is in the lower limits of normal.

Electroencephalogram (EEG) findings in those children with minimal brain damage are inconsistent and nonspecific. For that reason, we do not find this laboratory test very helpful in the diagnosis at this time.

TREATMENT

The response of the minimally brain-damaged hyperactive child to drug therapy is one of the most gratifying experiences one can have occur in his practice. When the happy combination of proper management and maximum drug effect ensue, the gratitude of a great number of people spontaneously falls on the physician. The teachers are delighted, the parents are thankful and even the child appreciates the change. This is a direct "about face" to the child's first visit when the mother dragged him to the office for treatment when she was weary, despondent and "fed up to the ears." In fact, I have known parents to say on their first visit that whatever we decided for the child was fine with them—"we can't and don't want to be responsible for him anymore when he's like this." Needless to say, this attitude dramatically reverses itself in a very few weeks.

Drug Treatment

The drug of choice in my practice is either dextro-amphetamine or methylphenidate in adequate doses given at appropriate times. Adequate dosage may reach up to 40 mg or more per day in a few cases; but, generally, it is felt that dosages above 20 mg per day may well have an adverse effect on growth.[5] The timing must be adjusted to the particular idiosyncrasies of the child. Both drugs begin to act within the half hour and tend to lose their effect in less than four hours. They also tend to affect appetite and sleep. Hence, one tries to give medication so that it will be working during school hours and, at least, during the child's high period of hyperactivity. It is best given 15 to 30 minutes before breakfast and lunch, and usually the last dose is given no later than 5 PM-6 PM. On weekends and during vacation, I recommend discontinuance of the drug if the child can be tolerated at home and in the environment. I do encourage the parents to use the medication at any special time during these school breaks when the child needs to be able to pay attention and be relatively quiet, such as at church services and summer school. Once the medication has been optimally adjusted, the dosage may be maintained until the child reaches puberty, since the condition seems to improve when pubescence begins. The tip off to discontinue medication may come when the child is near or at puberty and begins to once more show his previous characteristic behavior. When this happens, discontinuance of the medication over a two-week period should be attempted. Incidentally, one of the fringe benefits often encountered is the control of bed wetting in some enuretic children when the medication is started. I tend to prefer methylphenidate over dextro-amphetamine in my practice because of the following reasons:

1. It interferes less with sleep and appetite.
2. Parents feel less uneasy using methylphenidate (Ritalin) since amphetamines have a bad "newspaper" reputation.
3. There is less potential for abuse with methylphenidate if the medication falls into other hands.

A lack of improvement on one drug calls for trial with the other. The regimen I most commonly use is as follows:

1. I give the mother a behavior check list which she check marks before medication is begun and three days after. She brings this list with her on every visit.
2. The child is given a test dose of 10 mg of methylphenidate in my office and is observed one hour later. This gives me a reasonably good indication as to whether or not this particular child will be improved by Ritalin.
3. If the response in (2) is positive, the mother is instructed to give her child 5 mg of Ritalin in the morning and at noon, 15 to 30 minutes before eating. This is continued for three days.
4. Medication is adjusted thereafter to give maximum benefit. Sprague[6] feels that the optimum effect is reached at approximately 0.5 mg/kg/day and that a higher dosage than this is no more effective and may, in fact, have an adverse effect on the growth of the child.

Educational Management

Since the teachers frequently cannot tolerate disruptive behavior in the classroom, it is important that the physician work in close cooperation with the school. It is amazing how much more tolerant and helpful a teacher can be when she knows something is being done to help improve a child's behavior. Progressive schools now have special programs for this type of exceptional child and it includes Strauss cubicles, rugs and special remedial exercises. It is accepted that the visual-motor and visual-spatial dysfunctions can be helped by specially designed exercises given at regular sessions. At the same time, support and explanation to the parents is essential to alleviate their guilty and hostile feelings. They also need encouragement to look to the future with hope and must be helped to learn how best to realistically help their child's maturation.

Discussion

It might be well to mention that many workers, both medical and nonmedical in the field of child psychiatry and child development repudiate the concept of brain damage for these children and prefer to think of this condition as a lack of maturation of the central nervous system (CNS) leading to dysfunction. Hence they call it minimal brain dysfunction. The term dysfunction does seem to fit in well with the improvement experienced at puberty and seems to be better accepted by the parents than the term "brain damage" so that the term (if not the concept) is slowly gaining favor.

Several important points must be emphasized in regards to this syndrome as follows:

1. The syndrome of minimal brain damage is not necessarily confined to the hyperactive child but also may be seen in the withdrawn, day-dreaming child who never moves from his seat in class. Appropriate examination may show visual-motor and perceptual deficits and other supporting evidence of minimal brain damage in these children.
2. The finding of a learning disability by itself does not warrant the diagnosis of minimal brain damage. Many children suffer from a specific learning disability, such as dyslexia, without associated brain damage. Its presence when accompanied by other soft signs as previously mentioned, however, lends greater weight to the diagnosis.
3. There is insignificant danger of the development of an amphetamine psychosis in these children regardless of dosage of drug being taken daily. Comley[7] spoke of one case out of 2,000 and Bradley reported no cases of psychosis in his group of treated children.
4. As a rule, barbiturates make these children much worse and this paradoxical reaction has been proposed as a reliable diagnostic test.
5. Addiction to the stimulants by these children does not occur.
6. For some yet unexplained reason, some hyperactive children, who are *not* minimally brain damaged, respond equally well to the same drug regimen. So when faced with a particularly difficult case for differential diagnosis, treatment can be instituted without delay with approximately a 75% chance of improvement of behavior.
7. Recent work by Satterfield, Cantwell *et al*[8] suggests that children who show an abnormal EEG and four or more "soft signs" have an almost 100% chance of responding favorably to a stimulant.

CONCLUSION

The syndrome of the hyperkinetic child, regardless of his or her etiology, is a real and trying condition for all who are associated with its victim. It can and does ruin the child's personality at times; it does create havoc in the classroom and other settings, e.g., church; it can ruin a marriage and break up a family. More than 20% of the evaluations done in our outpatient child psychiatry clinic are in reference to this condition. Certainly, more research must be done in this area since it may well prove to be a preventable condition.

SUMMARY

A syndrome of minimal brain dysfunction is commonly encountered in the child psychiatry clinics and may be suspected by the presence of the cardinal symptoms of hyperactivity, impulsivity, distractibility, shortened attention span and low frustration level. The additional findings of visual-motor and perceptual dysfunctions as well as a positive Bender-Gestalt or typical WISC make the diagnosis tenable. The condition is well controlled in approximately 75% of cases by adequate dosage of methylphenidate or d-amphetamine until early adolescence at which time the child appears to begin to be able to control his behavior without medication. An untreated child has a great chance of developing an aggressive, warped personality. Even though the characteristic behavior seems to improve at puberty, the crystallized personality remains with him. Dosage above 0.6 mg/kg/day has been shown to be significantly correlated with retardation of growth in these children.

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Reprints: James L. Chapel, M.D.
University of Missouri
Mental Health Center Building
803 Stadium Road
Columbia, Mo. 65201

EDITO C. CABAL, M.D. *and*
JOHN B. SHIELDS, M.D., *St. Louis*

Tracheal Soft Tissue Mass

Case Reports

These case reports of tracheal soft tissue mass call attention to the difficulty of early diagnosis due to nonspecificity of symptoms and the importance of careful scrutiny of the tracheal air column, particularly in a patient with unexplained cough and hemoptysis with the lung fields clear. Dr. Cabal is an Instructor and Dr. Shields is Associate Professor, Department of Radiology, St. Louis University School of Medicine. Both also are from the Department of Radiology, St. Louis Veterans Administration Hospital, where Dr. Shields is Chief.

EARLY DIAGNOSIS of a tracheal soft tissue mass presents a diagnostic problem due to the nonspecificity of symptoms and the paucity of radiographic findings. Often, the tracheal soft tissue mass is missed in the initial chest radiograph. Case reports of a primary undifferentiated small (oat) cell carcinoma and of a squamous cell carcinoma of the trachea are presented.

CASE REPORTS

Case # 1 This 45-year-old white man was admitted to the hospital because of intermittent cough, hemoptysis and shortness of breath of two weeks duration. He had been a cigarette smoker for the past 20 years, but he did not inhale the smoke. The initial physical examination revealed decreased breath sounds in the base of the right lung which subsequently cleared after five days without therapy. There were no other abnormal physical findings. The laboratory examinations were normal.

The posteroanterior radiograph of the chest (Fig. 1) revealed a soft tissue mass density in the left wall of the trachea 4 cm above the carina. The lung fields were normal. Tomograms of the trachea in anteroposterior (Fig. 2-A) and lateral (Fig. 2-B) views revealed a soft tissue mass which occluded approximately 80% of the tracheal lumen. No hilar abnormality was seen. Bronchoscopy disclosed a fungating tumor in the left tracheal wall projecting into the lumen. Several biopsy specimens were taken and fulguration of the tumor was performed. The carina was noted to be free of tumor. Serial microscopic sections showed the subepithelial stroma to be infiltrated with nests of undifferentiated small (oat) cell carcinoma. The tumoral nests were surrounded by aggregates of inflammatory cells. The patient was given a course of radiation therapy utilizing a Cobalt 60 unit; the total tumor dose was 3,723 rads in three weeks. Follow-up bronchoscopy and tomograms of the trachea in anteroposterior (Fig. 3) views six months later revealed disappearance of the tracheal soft tissue mass.

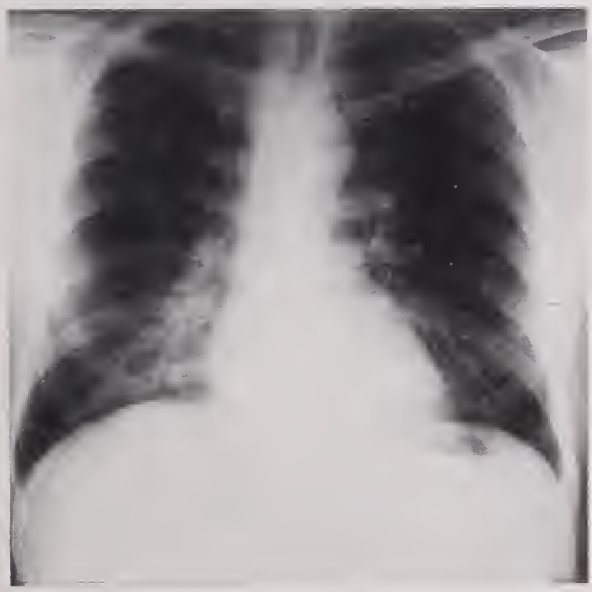
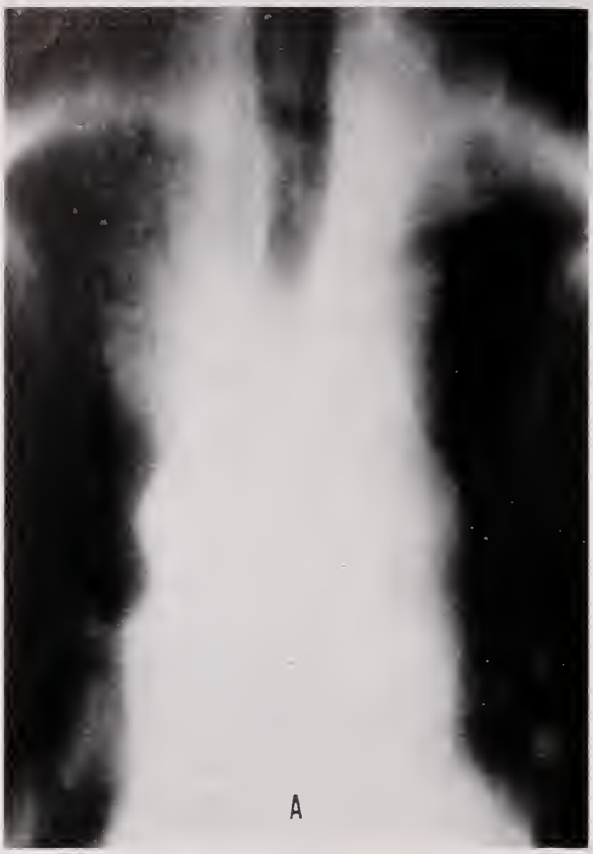


Fig. 1 Posteroanterior chest radiograph showing soft tissue mass in the trachea.

Case # 2 This 55-year-old white man was admitted to the hospital complaining of a choking sensation and progressive difficulty in swallowing for the previous six months. There were no other symptoms. He smoked one pack of cigarettes every other day. The physical examination was nonrevealing. Laboratory examinations were normal.

The chest radiograph in posterioanterior view (Fig. 4-A) revealed minimal right apical fibrosis with the rest of the lung fields clear. No hilar mass was seen. The lateral view (Fig. 4-B) revealed a non-calcified soft tissue mass impinging on the trachea posteriorly at the level of the thoracic inlet. A barium swallow (Fig. 5) again revealed the tracheal soft tissue mass displacing the cervical esophagus posteriorly. On esophagoscopy, a constriction approximately 4 cm below the cricopharyngeus was encountered



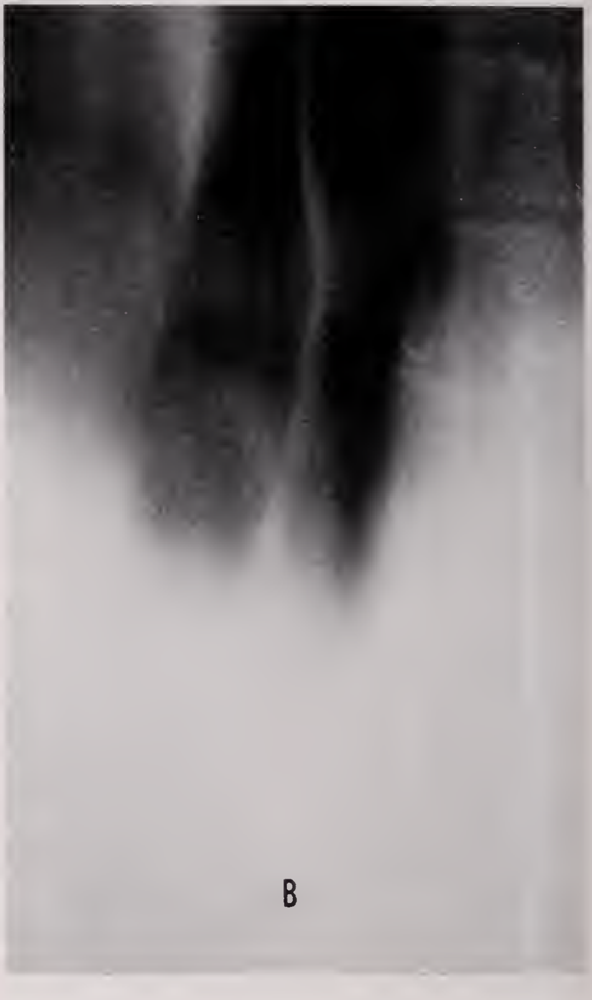


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Fig. 2 (A) Anteroposterior and (B) Lateral tomogram of the trachea delineating the margin of the tumor.

which did not allow further passage of the esophagoscope. There were no mucosal changes. No biopsy was taken. Bronchoscopy also was performed. Approximately 20 cm from the incisor teeth, the tracheal mucosa was found to be elevated and soft. Multiple superficial biopsy specimens were obtained. There were no lesions seen in the carina. Microscopic examinations of the biopsy specimens revealed a moderately well-differentiated squamous cell carcinoma. The patient received local radiation therapy with Cobalt 60 with a total tumor dose of 4,006 rads in five weeks. Repeat barium swallow (Fig. 6) at the end of the radiation therapy course revealed almost complete disappearance of the mass, and repeat bronchoscopy two weeks later showed only residual muscosal irregularity but no recognizable tumor.

Discussion

A tracheal soft tissue mass may be either a benign or malignant lesion. The benign tumor

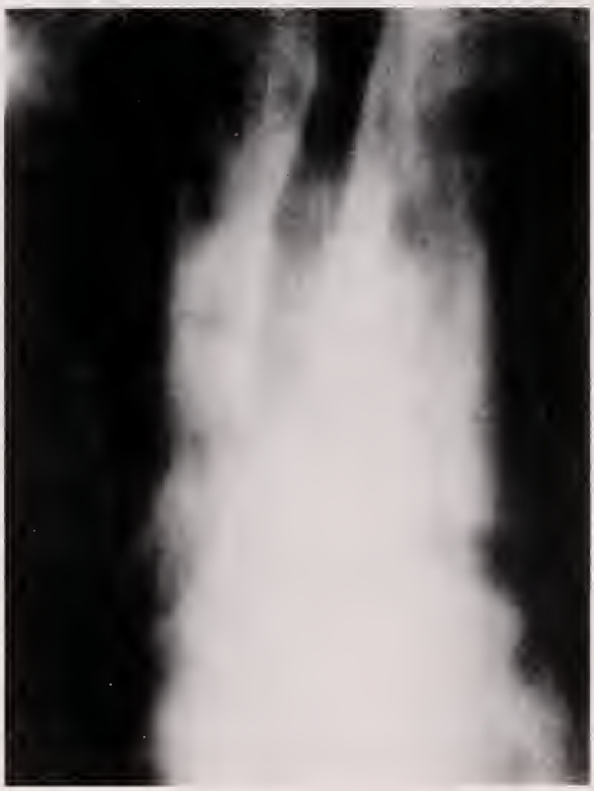

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Fig. 3 Anteroposterior tomogram of the trachea six months after radiotherapy showing disappearance of the tracheal mass.

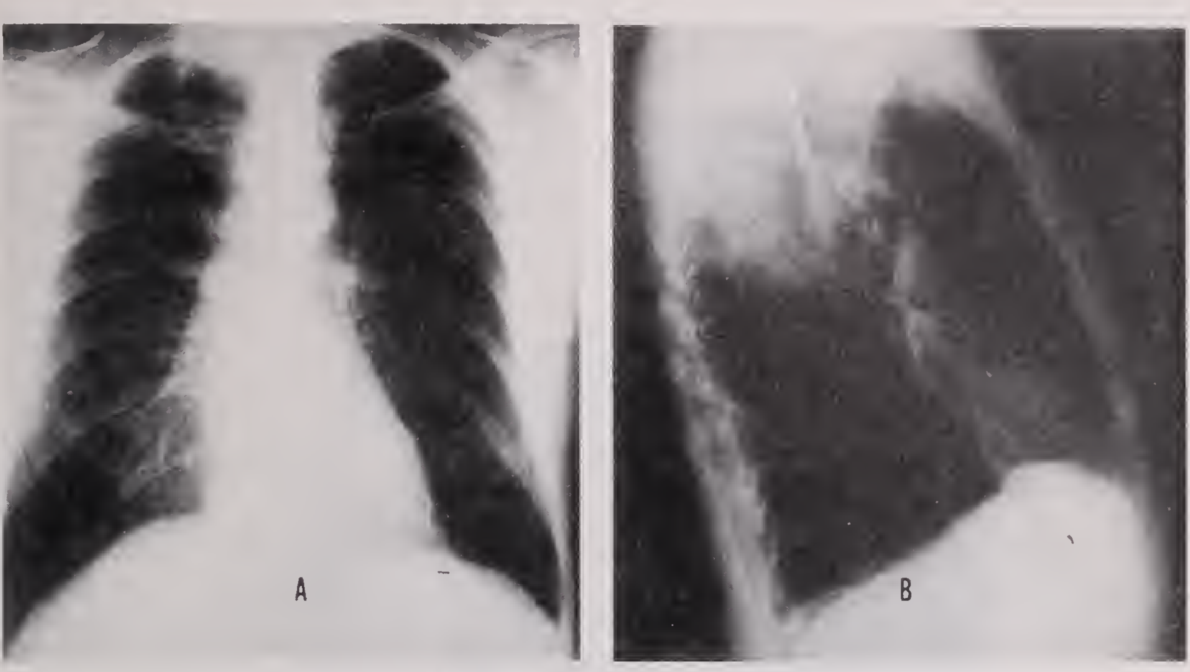

Fig. 4 (A) Posteroanterior chest radiograph showing right minimal apical fibrosis with the rest of the lungs clear. (B) Lateral view showing the tracheal air column with soft tissue mass posteriorly at the level of the thoracic inlet.

and tumor-like conditions of the trachea encountered are squamous papilloma, hamartoma, inflammatory fibrous polyps, lipoma, myeloblastoma, amyloid, xanthoma, leiomyoma and tracheopathia osteoblastica.[1] The peak incidence of most of these lesions is in the "cancer age." Men are affected about three times more often than women. Squamous cell papillomas are seen in younger adults.

Primary carcinoma of the trachea is rare. The exact incidence is not known. Men are affected twice as often as the women with the peak incidence at fifth decade. Squamous cell carcinoma and adenoid cystic carcinoma (cylindroma) are the most common malignant tracheal tumors. Cases of malignant adenocarcinoma, undifferentiated small (oat) cell carcinoma, muco-epidermoid carcinoma and carcinoma of mesenchymal origin have been reported as well.[2]

Signs and symptoms may initially be absent. As the tumor increases in size and depending on the degree of obstruction, secondary changes in the lung fields will be seen. The patient may have cough, stridor, hoarseness, increasing dyspnea and dysphagia. Hemoptysis is usually a late sign. In a patient with unexplained cough, wheezing or hemoptysis with clear lung fields on the chest radiograph, a tracheal lesion should be considered and a high kilovoltage, overpenetrated film of the chest should be taken to evaluate the tracheal air column. Tomograms of the trachea will help in delineating the tumor. A

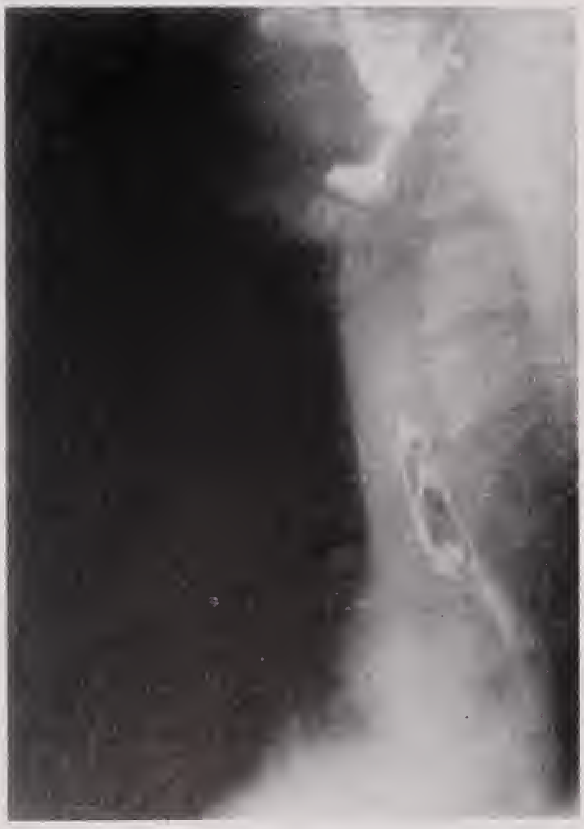

Fig. 5 Lateral view of the cervical area again revealing the tracheal soft tissue mass with posterior displacement of the barium filled cervical esophagus.

tracheogram utilizing opaque contrast medium is not necessary since the air provides good contrast material.[3] A barium swallow should also be obtained for further delineation of the extent of the tumor. The clinical and radiographic manifestations of these benign and malignant lesions are so similar that bronchoscopy and adequate biopsy are the most reliable means of establishing the diagnosis.

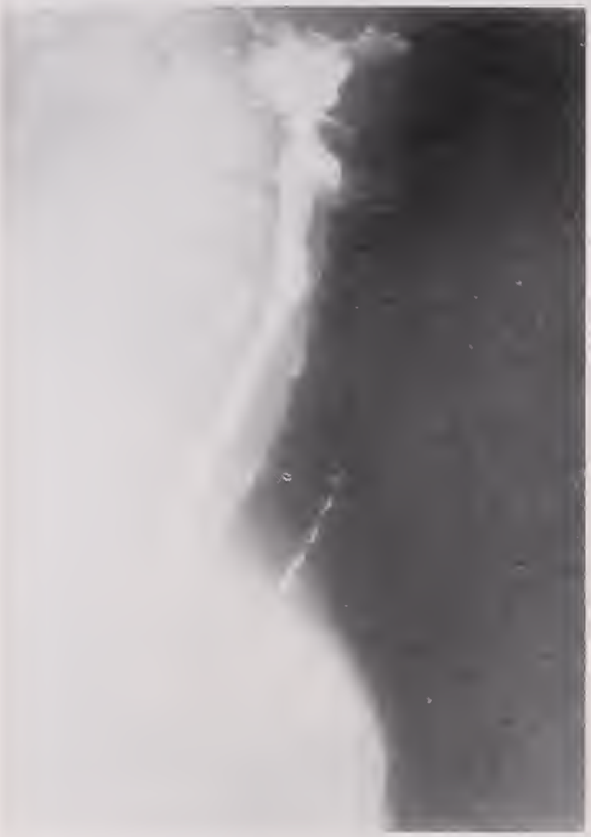

Fig. 6 Barium swallow after the course of radiation therapy shows regression of the tumor.

SUMMARY

Two cases of tracheal soft tissue mass which proved to be a small undifferentiated (oat) cell carcinoma and a squamous cell carcinoma are reported. There is difficulty with the early diagnosis due to the nonspecificity of symptoms and the paucity of radiographic findings. The importance of careful scrutiny of the tracheal air column in an overpenetrated chest radiograph cannot be overemphasized, particularly in a patient with unexplained cough and hemoptysis with the lung fields clear. Examination of the esophagus with barium is invaluable in delineating the extent of the tumor outside the trachea.

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Reprints: Edito C. Cabal, M.D.
Veterans Administration Hospital
St. Louis, Mo. 63125

In Memoriam

Rudolph F. Kurz, M.D., 1000 Milton Rd., Alton, Ill., a graduate of the University of Louisville, 1926; member of St. Louis Medical Society; age 75; died Aug. 25, 1973.

George M. Ragsdale, M.D., Paris, a graduate of Louisville Medical University, 1907; member of Chariton-Macon-Monroe-Randolph Counties Medical Society; age 87; died Sept. 7, 1973.

John W. Deyton, M.D., 1617 S. Brentwood Blvd., St. Louis, a graduate of the University of North Carolina, 1929; member of St. Louis County Medical Society; age 73; died Sept. 12, 1973.

Lynn D. Weller, M.D., 6700 Troost, Kansas City, a graduate of the University of Utah, 1963; member of Jackson County Medical Society; age 36; died Sept. 17, 1973.

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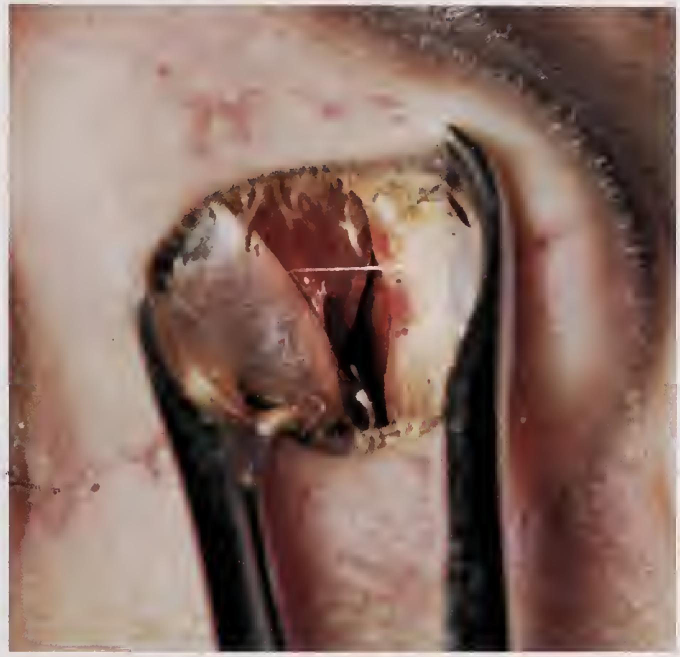

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President's Message

What's Happening to Our Drugs?

While the attention of most doctors has been focused on PSRO, HMO, HNI and the like, the FDA has slowly but surely been eliminating the drugs we use.

The FDA does not always forbid their use, but it does require that the pharmaceutical firms submit detailed research on each drug to prove that the medication is effective, even though that drug has been in use for 20 years. These drugs, which have been standbys for years, are economical, competitive and represent low profit items for the drug houses. However, the firms are not going to spend five years of research and more than $1 million to meet the criteria for acceptance. So, when the stock of one drug is depleted, there is no more production of that item.

E. A. Stricker, M.D.

Not only are we deprived of many of the old medicines, but we have undue delays in getting new drugs approved—usually five or six years after the rest of the world has them in use. The procedures by which new drugs are evaluated and approved for use in this country are causing us to fall behind in this area of medical science.

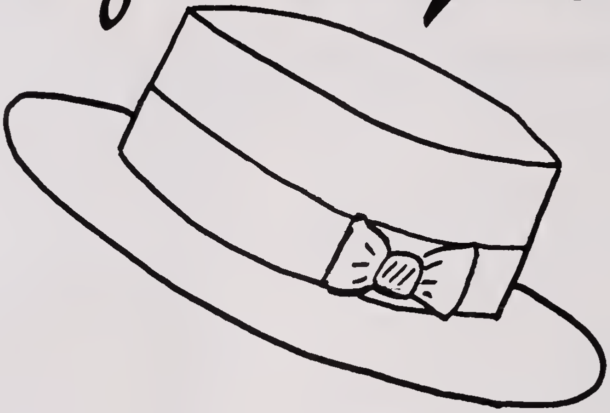
A classic example is the drug, rifampin, which is a powerful new antibiotic for treating tuberculosis. Discovered in Italy, the drug was in use in 50 other countries before it became available in the U.S.A. During the time it was being approved, 17,000 TB victims died in this country. Time and space do not permit enumeration of the hundreds of new drugs which we are denied because of the red tape and executive time required for approval.

The FDA has become a mighty bureaucratic force, expanding regulations and paperwork in all directions. For example, in 1948, Parke, Davis & Co. obtained a license for Benylin Expectorant with 73 pages of facts. In 1968, the same company's application for Ketalar required 72,200 pages of facts for the FDA.

This excessive amount of red tape not only delays the time for the drug's availability, but also reflects much higher costs to our patients. It also discourages our own U. S. drug firms from developing new medicines, although for years they were leaders in this field. Before 1962, the U. S. pharmaceutical industry produced and marketed an average of 43 new drugs annually. In the last five years, the average has been 13, and the cost of research has risen from $212 million in 1960 to $728 million last year.

This type of federal interference leads to the practice of inferior medicine at higher health care costs. It behooves us to talk to our Congressmen about this dilemma.

the same hat doesn't fit everyone



We wear the hats of Democrats, Republicans and Independents. But, we're all physicians and we are all concerned. Concerned about legislation which could lead to the destruction of the fee for service concept . . or the physician-patient relationship . . or the quality of health care . . and a lot of other things. That's why we decided to do something . . to get involved. Some of us just offer our dues dollars while others actually get out and get involved in the campaigns of people we would like to see get elected. In 1972, we helped elect 203 people to Congress that don't want to destroy the American health care system.
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Woman's Auxiliary

50th Anniversary

L-E-G-S

L-E-G-S stands for Legislative Effort Group System, which is another point on our Woman's Auxiliary five-point TEL-STAR program for service. It refers to the unique communications system which Auxiliary members utilize to assist our Missouri doctors in making their views on legislative matters known to county, state and national legislators on a moment's notice.

Our basic **L-E-G-S** team is composed of our State Legislative Chairman, Mrs. Gerald L. Miller, Kansas City; State Public Affairs Chairman, Mrs. James A. Reid, Marshall; our 26 county legislative chairmen; and the county **L-E-G-S** committees. The county chairmen and their **L-E-G-S** committees are ready to mobilize immediately upon receipt of a telephone call or a letter.

We believe we have proved the effectiveness of this system and take pride in the success of our collective letter writing to the representatives and senators in opposition of Senate Bill #14. We are holding communications lines open to be sure that we are ready when an alert is sounded again. The fact remains, however, that with more Auxiliary members involved, our efforts can be even more encompassing. Please encourage your wife to join the Auxiliary now and help us in this important legislative effort.

Mrs. Charles R. Willman
President

It's true that, at times, there seems to be confusion about the separation of politics and legislation. We suggest that politics deals with people and legislation deals with laws. If we are to be effective in influencing passage of the right laws, we have important responsibilities ahead. First, all Auxiliary members must be knowledgeable and know the issues and how organized medicine can help to resolve them. Second, we must share our knowledge with friends, neighbors and legislators to inform them of our views.

It is important that Auxiliary members be involved in every available opportunity to help strengthen the quality of health care in our country. A most vital opportunity is membership in **MMPAC.** Every member has been invited to join. For your information, an Auxiliary membership is $15, a family membership is $40 and a sustaining membership is $100.

Remember that your and your wife's support of MMPAC is as important in non-election years as in election years, since MMPAC is a continuous function and maintains uninterrupted interest in supporting candidates who understand and share medicine's point of view, regardless of their party affiliations.

Our record for the 1972 elections showed a remarkable percentage of success. Let's alert ourselves now in preparation for the 1976 elections and raise that percentage. If you have not joined MMPAC, please do so by sending your check today to our Public Affairs Chairman, Mrs. James A. Reid, 102 East Rea, Marshall 65340.

(A copy of the MMPAC report, filed with the appropriate supervisory officer is (or will be) available for purchase from the Superintendent of Documents, United States Government Printing Office, Washington, D. C. 20402.)

EDITORIAL

PUTTING HMOs TO THE TEST

One of the more interesting debates coming up as Congress reconvenes is how heavily the government should promote formation of health maintenance organizations (HMOs), which are founded on a theory that it's better to try to keep people well than to wait for them to develop illnesses before treating them.

Whether HMOs are an attractive alternative to more traditional forms of health care delivery has had inconclusive testing and debate. There would seem to be no reason why some modest government aid should not be applied to carrying the test further.

But the HMO debate will also pit two opposing theories of government. It will be a good opportunity for Congress to demonstrate that it has moved beyond the kind of thinking, so common in the '60s, that tackles complex problems—to lift a Nixon phrase—by "throwing money at them."

The administration itself, it should be noted, was guilty in 1971 of that style of thought on health care. It adopted HMOs as a panacea for a general discontent over medical costs, proposing to make HMOs available to 90% of the population by 1980. Today, however, it is merely backing a $60 million, one-year House bill to subsidize HMO formation, which, by federal standards, puts the program in the largely experimental category. Senator Kennedy, however, has pushed a bill through the Senate calling for spending $805 million over three years.

Some of the latter-day administration diffidence is perhaps attributable to budget concerns or possibly lobbying against HMOs by the American Medical Association. But the main reason is more likely a timely fear that a vast, taxpayer-financed federal overhaul of health care delivery might produce a fiasco on the order of, say, some of the housing schemes of the '60s.

That's a very good reason. If the HMOs really are a better idea, they will prove their worth if government merely provides them with opportunities to grow freely. The Kennedy approach is to ram them down everyone's throat.

Simple, facile prescriptions for the problems of American health care should always be approached with skepticism. Health care is a complex and pluralistic industry. Its quality and ability to meet varieties of needs are better than its critics maintain. Some of the difficulties of the poor which are blamed on the medical profession are far broader—having to do with nutrition, inadequate housing, drug misuse and ignorance of rudimentary principles of health protection.

But there can be little doubt that for some people, and for some types of illnesses, high costs are a fundamental problem. Past government efforts to deal with the cost problem, through such giant programs as Medicare, have reduced costs for some people but exacerbated them for others by increasing inflationary pressures in the industry. Massive subsidies, as usual, have generated new inequities.

Government can, however, tackle some of the problems of health care in relatively undramatic ways. Government, for example, has the authority to supersede self-regulation in the health industry when self-regulation has failed to allow broad enough access to the medical profession and sufficient scope for new methods of health care delivery, such as HMOs.

The administration's HMO bill moves in this direction through provisions that would seek to pre-empt state laws that inhibit the development of HMOs. These laws, for example, bar corporate practice of medicine or classify HMOs as insurance schemes that must meet certain capitalization requirements. This kind of legislative approach is tough and ticklish, involving as it does state and professional prerogatives. But in fact, nine states, with federal urging, have themselves moved to clear the way for HMOs since 1971 and another 20 or so have changes in the works.

This kind of hard, slogging legislative work is what government should be about. It is time to bury the idea that complex problems must always be tackled with dramatic, sweeping programs. Too often, such programs are characterized by lack of sufficient thought, a waste of taxpayer money and benefits to all sorts of people except those who have the problem.

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Sept. 6, 1973

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LETTERS to the Editor

The Editor
Missouri Medicine

Dear Dr. Finnegan:

Please accept hearty congratulations for the superb April, 1973 number of Missouri Medicine. The articles on "Angina Pectoris" and the "Psychopharmacology of the Depressive Neurosis" are especially praiseworthy. For us (or is it we?) poor chaps who wonder how we will ever keep up with our continuing medical education, they are perfect—much better than attending a seminar or meeting.

The idea of having medical students write a review of a subject under the guidance of a faculty advisor is one that should be put into *regular* practice by offering a small prize or by making it a requirement for certain courses.

Thank you for your editorial leadership.

Sincerely,
Michael Gass, M.D.
P.O. Box 5
Adidome, V. R.
Ghana

Continuing Education Coming Events

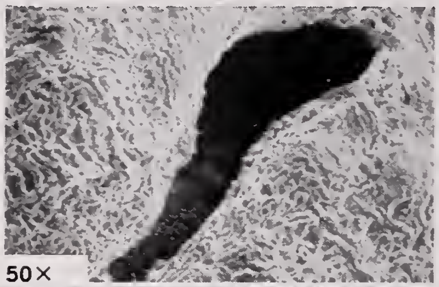
Nov. 2-3	**Postgraduate Seminar: Recent Trends in Obstetrics and Gynecology** St. Louis U. School of Medicine Cheshire Inn and Lodge, St. Louis
Nov. 5-8	**Symposium: Internal Medicine** Postgraduate Medical Education, K.U. School of Medicine Kansas City, Kan.
Nov. 7-8	**Conference: Causes of Developmental Disability and Parent Counseling** Continuing Education, M.U. Medical Center Columbia
Nov. 28-30	**Symposium: Medical Technology** Postgraduate Medical Education, K.U. School of Medicine Kansas City, Kan.
Dec. 7-8	**The Long Weekend: Infectious Disease, Pulmonary Disease** University of Missouri-Kansas City School of Medicine and Kansas City Southwest Clinical Society Crown Center Hotel, Kansas City
Dec. 7-8	**Annual Scientific Meeting** Kansas City Society of Ophthalmology and Otolaryngology Plaza Inn, Kansas City
Jan. 25-26 (1974)	**The Long Weekend: Immunology, Hematology** University of Missouri-Kansas City School of Medicine and Kansas City Southwest Clinical Society Crown Center Hotel, Kansas City
Jan. 31-Feb. 1	**Symposium: Diagnostic Cytology** Postgraduate Medical Education, K. U. School of Medicine Kansas City, Kan.

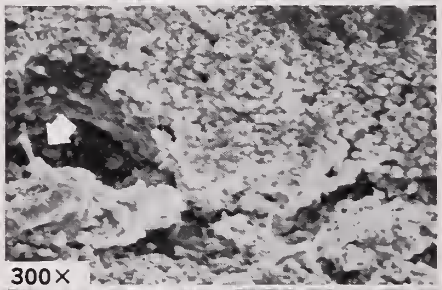
Progress i

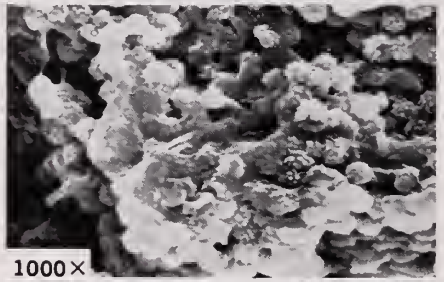
Diagnosis

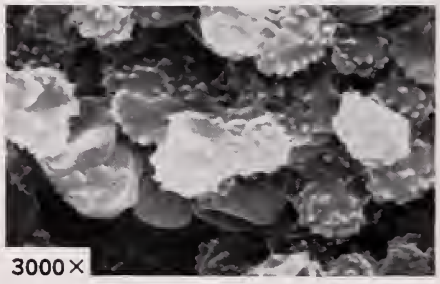
In these illustrations of tissue from a patient with acute cystitis, you can see the swollen and inflamed mucosa of the ureteral orifice (50×), a fibrin strand (300×), and a whitish exudate composed of polymorphonuclear leukocytes (1000× and 3000×). The photographs were taken with the scanning electron microscope (SEM) by Dr. Shirley Siew, Associate Professor of Pathology at the University of Pittsburgh School of Medicine. They come from the clinical exhibit "Scanning Electron Microscopy of Urinary Tract Infection," which won first prize in Clinical Research at the May 1972 meeting of the American Urological Association.

The scanning electron microscope promises to be extremely useful in its investigation of human pathology. In time, examination of tissue with the SEM is likely to play a significant role in the diagnosis of urinary tract infection.









A note on the photography:
These photographs were made by the
ning electron microscope, which, lik
transmission electron microscope, op
on the basic principle of exposure of
to a beam of electrons in a vacuum. V
the SEM, electrons bombard the surf
of tissue which has been given a fine
ing of gold. The electrons reflect off t
tissue onto a television screen, and th
resulting photograph shows a three-d
sional effect. The tissue sections nee
be ultrathin, so there is a minimum o
handling and distortion.

Just as much an instrum
of progress and just as helpful ir
way has been Gantrisin (sulfiso
zole) Roche, developed and intr
duced a generation ago. Howeve
there's been no generation gap
its continuing usefulness. In fac
Gantrisin, with so many years of
clinical experience behind it, is
still one of the most valuable dru
we have for the treatment of non
obstructed cystitis, pyelitis or py
lonephritis due to susceptible
organisms such as *E. coli*. Speci
cally, Gantrisin provides your pat
with certain important therapeu
advantages:

References: 1. Bran, J. L.; Karl, D. M., and Kaye, D.: *Clin. Pharmacol. Ther., 12*:525, 1971. **2.** Burke, E. C., and Stickler, G. B.: *Mayo Clin. Proc., 44*:318, 1969. **3.** Hibbard, L. T., in Bulger, M. J., *et al.*: *Patient Care, 1*:(3) 47, 1967. **4.** Holloway, W. J.; Furlong, J. H., and Scott, E. G.: *J. Urol., 102*:249, 1969. **5.** House, T. E., *et al.*: *Obstet. Gynecol., 34*:670, 1969. **6.** Lampe, W. T.: *J. Am. Geriatr. Soc., 16*:798, 1968. **7.** Moffat, N. A., and Wenzel, F. J.: *Curr. Ther. Res., 13*:286, 1971. **8.** Normand, I. C. S.: *Practitioner, 204*:91, 1970. **9.** Pryles, C. V.: *Med. Clin. North Am., 54*:1077, 1970. **10.** Seneca, H.; Peer, P., and Warren, B.: *J. Urol.,* 99:337, 1968. **11.** Trafton, H. M., and Lind, H. E.: *J. Urol., 101*:392, 1969. **12.** Cohen, M.: *Pediatrics, 50*:271, 1972.

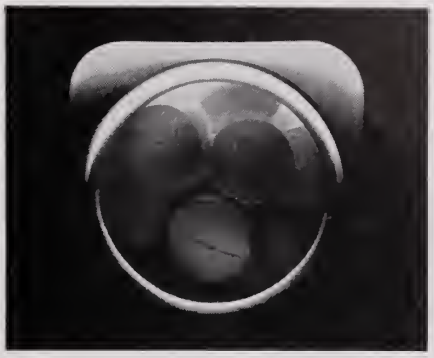
Before prescribing, please consult complete product information, a summary of which follows:

Indications: Nonobstructed urinary tract infections (mainly cystitis, pyelitis, pyelonephritis) due to susceptible organisms. **IMPORTANT NOTE:** ***In vitro*** **sensitivity tests not always reliable; must be coordinated with bacteriological and clinical response. Add aminobenzoic acid to follow-up culture media. Increasing frequency of resistant organisms limits usefulness of antibacterial agents, especially in chronic and recurrent urinary infections.** Maximum safe total sulfonamide blood level, 20 mg/100 ml;
measure levels as variations may oc
Contraindications: Hypersensitivity
sulfonamides; infants less than 2
months of age; pregnancy at term a
during the nursing period.
Warnings: Safety in pregnancy not e
lished. Do not use for Group A beta-
lytic streptococcal infections, as sec
(rheumatic fever, glomerulonephrit
are not prevented. Deaths reported
hypersensitivity reactions, agranulo
tosis, aplastic anemia and other blo
dyscrasias. Sore throat, fever, pallor
purpura or jaundice may be early in
cations of serious blood disorders. C
and urinalysis with careful microsco

cute cystitis:

Treatment

rinary levels As a urinary anti-
rial, Gantrisin (sulfisoxazole)
your patients important ad-
ges. Therapeutic urinary and
a concentrations are usually
ed in from 2 to 3 hours and can
intained on the recommended
Gm/day dosage schedule that's
nient for almost all patients.
ally good tolerance Gantrisin
s relatively few undesirable
ons, and serious toxic reac-
re rare. Minor reactions are
ratively infrequent, but may
e nausea, headache and vomit-
ence, Gantrisin may usually
en even for extended periods
treating chronic or recurrent
structed cystitis, pyelitis or
ephritis due to *E. coli* and
susceptible organisms. (See
tant Note in summary of product information.) Complete blood counts and urinalyses, with careful microscopic examination, should be performed frequently.



high solubility Gantrisin (sulfisoxazole) Roche is one of the most soluble of all sulfonamides, with both free and acetylated forms highly soluble in the commonly encountered urinary pH range of 5.5 to 6.5. Urine levels have been detected in 60 minutes; therapeutic levels are usually reached in from 2 to 3 hours. About 90% of a single dose is excreted in 24 to 48 hours. As with all sulfonamides, adequate fluid intake must be maintained.

economy Average cost of therapy is still only about 6½¢ per tablet.

total therapy: 14 days Recent evidence in the medical literature suggests that therapy in acute nonobstructed urinary tract infections should be continued for 10 to 14 days even if patients become asymptomatic in 2 or 3 days, as they often do.[1-11] However, one investigator, evaluating a 5-year study of sulfisoxazole used to treat urinary tract infection in 368 girls, found no advantage in continuing therapy more than two weeks *for a first infection*.[12]

For acute, chronic or recurrent nonobstructed cystitis, pyelitis, or pyelonephritis due to susceptible organisms...

begin with

Gantrisin®

sulfisoxazole/Roche®

Usual adult dosage: 4 to 8 tablets *stat*
2 to 4 tablets *q.i.d.*

ation should be performed fre-
.
ions: Use cautiously in patients
paired renal or hepatic function,
allergy or bronchial asthma.
sis, frequently dose-related, may
glucose-6-phosphate dehydro-
deficient patients. Maintain
te fluid intake to prevent crystal-
d stone formation.
Reactions: *Blood dyscrasias:*
ocytosis, aplastic anemia, throm-
enia, leukopenia, hemolytic ane-
rpura, hypoprothrombinemia and
oglobinemia; *Allergic reactions:*
a multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; *Miscellaneous reactions:* Drug fever, chills and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L.E. phenomenon have occurred. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.

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County Society News

SECOND DISTRICT

COUNCILOR
LYSLE M. BACH, M.D., HANNIBAL

Chariton-Macon-Monroe-Randolph County Medical Society

The September meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held on the 17th at the Library Conference Room of Woodland Hospital in Moberly.

Members present were Drs. F. L. Harms and D. D. Stuart, Chariton County; J. E. Campbell, Gretchen D. Collins and D. E. Eggleston, Macon; F. A. Barnett, Monroe County; and C. C. Cohrs, P. V. Dreyer, J. W. Fleming, T. S. Fleming, L. E. Huber, G. R. Hudson, R. V. Tompson, R. H. Young and R. L. Bautista, Randolph County.

Dr. Robert Young, President, presided. He presented a tribute to the late Dr. George Ragsdale of Paris, a former member of the Society and a practitioner of 67 years in the Paris Area.

Dr. Tompson presented the minutes of the previous meeting, which were approved. The financial report was then presented.

An invitation was presented to the membership from Barnes Hospital in St. Louis for ceremonies to be held on October 11, designating Barnes Hospital as the Regional Trauma Center. Dr. J. W. Fleming then presented a status report of the AMPAC memberships. Dr. C. C. Cohrs presented a report on the formation of Professional Standards Review Organizations.

The program for the evening was presented by Dr. William Griffin, professor of obstetrics and gynecology at the University of Missouri-Columbia. Dr. Griffin spoke on "Anaerobic Infections" and presented criteria for diagnosis, identification and preferred methods of treatment. He also presented several interesting case histories to illustrate the severity of the problems and the increasing incidents of this particular form of infectious disease.

Dr. Leopold Lachance of Centralia was a guest at the meeting.

Robert V. Tompson, M.D., *Secretary*

Eighth Councilor District Holds Annual Meeting

David Weihaupt, Director of the Planning and Development Division of the American Medical Association, was the featured speaker at the annual meeting of the MSMA Eighth Councilor District of the Missouri State Medical Association on September 20 at Howard Johnson's Convention Center in Springfield.

Mr. Weihaupt opened the meeting program so that the physicians would have ample opportunity to discuss their views or disagreements with policies of the AMA.

E. A. Stricker, M.D., President of the MSMA, spoke at the meeting and gave the area physicians an update on the status of Professional Standards Review Organizations (PSRO) in Missouri.

Dr. Howard J. McAlhany, Springfield, is Councilor for the Eighth District which is composed of the following 15 Missouri counties: Barry, Barton, Christian, Dade, Dallas, Greene, Hickory, Jasper, Lawrence, McDonald, Newton, Polk, Stone, Taney and Webster.

IMPROVED ACCIDENT & HEALTH PROGRAMS

The Disability Income Policy sponsored by the Missouri State Medical Association since 1943 has now been made GUARANTEED RENEWABLE and income benefits are available up to $300.00 weekly to members under age 56 subject to acceptance by the Company.

Also, the Major Hospital and Nurse Expense Program offers higher limits with increased Room & Board Benefits.

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Must vasodilators and therapy for other diseases come into conflict?

not if the vasodilator is

VASODILAN®

(ISOXSUPRINE HCI)

the compatible vasodilator... no treatment conflicts reported

The cerebral or peripheral vascular disease patient often has coexisting disease[1] which calls for another drug along with his vasodilator. It may be a hypoglycemic, miotic, antihypertensive, diuretic, anticoagulant, corticosteroid, or coronary vasodilator.

Vasodilan is not incompatible with any of these drugs—no treatment conflict has been reported. And, unlike other vasodilators, Vasodilan has not been reported to affect carbohydrate metabolism, liver function, or intraocular pressure—or to complicate treatment of diabetes, hypertension, peptic ulcer, glaucoma, or liver disease.

In fact, there are no known contraindications to the use of Vasodilan in recommended oral doses, other than that it should not be given in the presence of frank arterial bleeding or immediately postpartum.

Indications: Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.
3. Threatened abortion.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.

Dosage and Administration: 10 to 20 mg. three or four times daily.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Adverse Reactions: On rare occasions, oral administration of the drug has been associated in time with the occurrence of severe rash. When rash appears, the drug should be discontinued. Occasional overdosage effects such as transient palpitation or dizziness are usually controlled by reducing the dose.

Supplied: Tablets, 10 mg.—bottles of 100, 1000, 5000 and Unit Dose; 20 mg.—bottles of 100, 500 and Unit Dose.

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[1] Gertler, M. M., et al.: Geriatrics *25*:134-148 (May) 1970.

Your Help Is Needed! Send It Today!

MISSOURI STATE MEDICAL FOUNDATION
113 Madison
Jefferson City, Missouri 65101

Dear Doctor:

"Missouri physicians encouraging and helping Missouri young people to attend medical school."

The above vital words state the purpose and goal of the Missouri State Medical Foundation, which has provided more than 1,010 loans to Missouri medical students since 1960.

The money for these loans has been made available through the generosity and dedication of the practicing physicians of Missouri.

Despite this past and present generosity, however, additional money is still needed to provide all the loans we would like to make to assist students.

You, as a practicing physician in Missouri, can make more funds available by contributing to the Foundation now. Such donations are tax deductible. This is an excellent time to make your 1973 gift since we are near the close of the tax year.

The need for more physicians is still great. We of the Missouri State Medical Association can and must help to fill this need by providing loans to medical students who are residents of our state. I am certain that you would not want the Foundation to turn away any deserving student because of our lack of funds.

Please send your check now. Make it payable to the Missouri State Medical Foundation and mail it to Box 1028, Jefferson City 65101. Today is not too soon.

Sincerely yours,

Byron M. Stuart, M.D.

President

SPONSORED BY THE MISSOURI STATE MEDICAL ASSOCIATION

The Missouri State Medical Foundation is classified by the Internal Revenue Service under Section 509(a)(3). Individuals may deduct up to 50% of their adjusted gross income for contributions made to the MSMF.

New Members

John W. Armstrong, M.D., 4940 Audubon, St. Louis, has become a member of St. Louis County Medical Society. Dr. Armstrong is a native of Farmville, Va., received his preliminary education at the University of Idaho and his M.D. degree at Washington University in 1969. He specializes in psychiatry.

Keith W. Ashcraft, M.D., 510 Medical Plaza, Kansas City, has become a member of Jackson County Medical Society. Dr. Ashcraft is a native of Hillsboro, Kan., received his preliminary education at the University of Kansas and his M.D. degree at the University of Kansas in 1963. He specializes in pediatric surgery.

Kil Young Baik, M.D., Keeling Clinic, Waverly, has become a member of Lafayette-Ray County Medical Society. Dr. Baik is a native of Korea, received his preliminary education at Seoul National University and his M.D. degree at Seoul National University in 1965. He specializes in general surgery.

Jon Ronald Bopp, M.D., 505 Glenview, Joplin, has become a member of Jasper County Medical Society. Dr. Bopp is a native of Alton, Ill., received his preliminary education at the University of Missouri and his M.D. degree at the University of Missouri in 1967. He specializes in obstetrics and gynecology.

Carlos J. Borromeo, M.D., 43 St. Joe St., Rivermines, has become a member of Mineral Area County Medical Society. Dr. Borromeo is a native of the Philippines, received his preliminary education at the University of San Agustin and his M.D. degree at the University of Santo Tomas in 1960. He specializes in pediatrics.

William B. Bradley, M.D., 731 E. High, Jefferson City, has become a member of Cole County Medical Society. Dr. Bradley is a native of Macon, received his preliminary education at the University of Missouri and his M.D. degree at the University of Cincinnati in 1955. He specializes in pediatrics.

James E. Carter, M.D., 9th and Euclid, Kansas City, has become a member of Jackson County Medical Society. Dr. Carter is a native of Kansas City, received his preliminary education at the University of Missouri-Kansas City and his M.D. degree at the University of Missouri-Columbia in 1969. He specializes in family practice.

Sae Rong Choi, M.D., 1736 Canary Cove, Brentwood, has become a member of St. Louis County Medical Society. Dr. Choi is a native of Seoul, Korea, received his preliminary education at Pusan National University and his M.D. degree at Medical College of Pusan in 1959. He specializes in general surgery.

Thomas R. Cotton, M.D., 2929 Baltimore, Kansas City, has become a member of Jackson County Medical Society. Dr. Cotton is a native of Geneseo, Ill., received his preliminary education at the University of Illinois and his M.D. degree at the University of Illinois in 1965. He specializes in otorhinolaryngology.

James B. Earnest, M.D., 2929 Baltimore, Kansas City, has become a member of Jackson County Medical Society. Dr. Earnest is a native of Oklahoma City, Okla., received his preliminary education at Oklahoma State University and his M.D. degree at Baylor University in 1966. He specializes in cardiovascular diseases.

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James G. FitzSimmons, M.D., 4320 Wornall Rd., Kansas City, has become a member of Jackson County Medical Society. Dr. FitzSimmons is a native of St. Joseph, received his preliminary education at Kansas University and his M.D. degree at the University of Kansas in 1969. He specializes in radiology.

Narayan C. Gupta, M.D., 5400 Arsenal, St. Louis, has become a member of St. Louis County Medical Society. Dr. Gupta is a native of Chittagong, India, received his preliminary education at Calcutta University and his M.D. degree at Chittagong Government Medical School in 1939. He specializes in psychiatry.

Emilio G. Horrilleno, M.D., 6917 W. Florissant, St. Louis, has become a member of St. Louis County Medical Society. Dr. Horrilleno is a native of the Philippines, received his preliminary education at Ateneo De Manila and his M.D. degree at the University of Philippines in 1942. He specializes in general surgery.

Jun-Shen Huang, M.D., 808 E. Wakefield, Sikeston, has become a member of SEMO County Medical Society. Dr. Huang is a native of Taiwan, received his preliminary education at China Medical College and his M.D. degree at China Medical College in 1967. He specializes in obstetrics and gynecology.

PROFESSIONAL BUILDING NORTH

2700 Hospital Drive
North Kansas City, Missouri

- Limited choice office space now available for physicians/dentists.
- Rapidly expanding Northland area needs family practice physicians and all specialties.
- Adjacent to North Kansas City Memorial Hospital—provides excellent tenant patient convenience.
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(816) 842-5711

Jit Kim Lim, M.D., 807 Stadium Rd., Columbia, has become a member of Boone County Medical Society. Dr. Lim is a native of China, received his preliminary education at St. Michael's Institution in China and his M.D. degree at the University of Singapore in 1960. He specializes in neurological surgery.

Paul M. Manske, M.D., 4969 Audubon, St. Louis, has become a member of St. Louis Medical Society. Dr. Manske is a native of Ft. Wayne, Ind., received his preliminary education at Valparaiso University and his M.D. degree at Washington University in 1964. He specializes in orthopedic surgery.

Cristeta Barbo Mencias, M.D., 3015 N. Ballas Rd., St. Louis, has become a member of St. Louis County Medical Society. Dr. Mencias is a native of the Philippines, received her preliminary education at the University of Philippines and her M.D. degree at Far Eastern University in 1964. She specializes in obstetrics and gynecology.

Robert J. Pelegrin, M.D., 17221 E. 23rd, Independence, has become a member of Jackson County Medical Society. Dr. Pelegrin is a native of Davenport, Ia., received his preliminary education at St. Ambrose College and his M.D. degree at State University of Iowa in 1963. He specializes in urology.

Abbiah N. Reddy, M.D., 623 Pine Blvd., Poplar Bluff, has become a member of Butler-Wayne-Ripley County Medical Society. Dr. Reddy is a native of India, received his preliminary education at Bangalore Medical College and his M.D. degree at Bangalore Medical College in 1963. He specializes in urology.

Thomas H. Waddell, M.D., 4320 Wornall Rd., Kansas City, has become a member of Jackson County Medical Society. Dr. Waddell is a native of Wichita, Kan., received his preliminary education at Wichita State University and his M.D. degree at the University of Kansas in 1969. He specializes in radiology.

Darryl L. Wallace, M.D., 4320 Wornall Rd., Kansas City, has become a member of Jackson County Medical Society. Dr. Wallace is a native of Louisville, Ky., received his preliminary education at Northwestern University and his M.D. degree at Northwestern University in 1969. He specializes in obstetrics and gynecology.

ELLIS FISCHEL STATE CANCER HOSPITAL
and the Associated CANCER RESEARCH CENTER

Semiannual Professional Program

Hodgkin's Disease and Other Lymphomas

Dec. 1, 1973 **Ramada Inn, Columbia**

8:00 AM Registration (no fee).

8:30 AM *Introduction,* James Thomson, M.D., Chief of Radiotherapy, EFSCH, and Senior Scientist, CRC.

8:40 AM *Pathology,* Asa Barnes, M.D., Associate Professor of Pathology, M.U. Medical Center.

9:30 AM *Work-Up and Staging,* Reginald Pugh, M.D., Chief of Medicine, EFSCH, and Senior Scientist, CRC.

10:15 AM Coffee Break.

10:45 AM *Lymphangiograms,* Hans Kuisk, M.D., Associate Professor of Therapeutic Radiology, University of Minnesota School of Medicine.

11:30 AM *Radiotherapy,* Lillian Fuller, M.D.

12:30 PM Lunch.

1:30 PM *Chemotherapy,* Saul Rosenberg, M.D., Professor of Medicine and Radiology, Stanford University Medical Center.

2:30 PM Coffee Break.

2:45 PM *Physics of Hodgkin's Disease and Other Lymphomas,* Alexander Turner, Ph.D., Chief of Medical Physics, EFSCH.

3:15 PM *Surgical Staging and Ellis Fischel Experience,* John S. Spratt, M.D., Chief of Surgery, EFSCH, and Director, CRC.

4:00 PM Adjourn.

The EFSCH-CRC Professional Program has been approved for five elective credit hours by the AAFP and is open to any interested medical personnel. For additional information, write to James M. Thomson, M.D., Ellis Fischel State Cancer Hospital, Business 70 and Garth Ave., Columbia, Mo. 65201.

Medical School Enrollments Set New Record for 1973-1974

One hundred and fourteen medical schools, the most since 1925, opened their doors for the 1973-1974 school year in the United States, according to a report in an October issue of *American Medical News*, a publication of the AMA.

The first-year entering class reached an estimated 13,790, which also is a new record. Total enrollment for the first time topped the 50,000 mark, with educators setting an estimate of 51,123, states the report based on statistics compiled by the AMA's Medical Education Division.

If all senior students get a degree on schedule, there will be 11,862 new physicians at the end of the school year, the first time this figure has gone over the 11,000 mark.

First year enrollment last year was 13,726, with 47,546 the total enrollment for all classes. There were 10,391 graduates, the first time the number receiving M.D. degrees had topped the 10,000 mark in any one year.

There were 924 women in the 1973 graduating class and 6,099 women enrolled in all medical schools.

A continuous climb in the production of new physicians is likely. It is estimated that in 1974-1975, first-year enrollments will rise to 14,336 and the number of graduates will exceed 13,000. The first-year enrollment figure will reach 15,000 for the first time with the opening of the 1976 year.

The two new schools which opened for the 1973-1974 school year are Southern Illinois University School of Medicine in Springfield and the Eastern Virginia Medical School in Norfolk.

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION (ACT OF AUGUST 12, 1970: SECTION 3685, TITLE 39, UNITED STATES CODE)

1. Title of Publication: MISSOURI MEDICINE.

2. Date of filing: September 28, 1973.

3. Frequency of issue: Monthly.

4. Location of known office of publication: 1201-05 Bluff Street, Fulton (Callaway), Missouri 65251.

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Missouri Medicine in Review

FORTY YEARS AGO

On October 20, Lincoln County Medical Society was organized at Troy for the first time with 12 physicians as charter members. Dr. W. P. Smith, Troy, was elected President; Dr. H. S. Harris, Troy, was elected Vice-President; and Dr. J. J. Allevato, Winfield, was elected Secretary and Treasurer.

On April 5, the Dallas-Hickory-Polk County Medical Society was organized with 16 members. Dr. A. S. Johnston, Wheatland, was elected President and Dr. J. L. Johnston, Wheatland, was elected Secretary-Treasurer.

The Perry County Medical Society, which has been inactive for several years, has been reorganized. Officers elected were Drs. O. A. Carron, Perryville, President; W. H. Abernathy, Menfro, Vice-President; and J. J. Bredall, Perryville, Secretary-Treasurer.

A phonetic clinical laboratory has been installed at the Central Institute for the Deaf in St. Louis. In this laboratory, the deaf and others with speech defects may see a graph of the sound vibrations of their speech and compare it with pictures of normal speech.

Dr. Caleb A. Ritter, Kansas City, was honored by the alumni of the University Medical College of Kansas City at a dinner on October 5. Dr. Ritter is 81 years old and has practiced in Kansas City for 49 years. He was an instructor at the University Medical College of Kansas City, was one of the first physicians in service at the General Hospital and is one of the organizers of the maternity department of the hospital.

TWENTY-FIVE YEARS AGO

The position of President Harry S. Truman, Democratic candidate for reelection to that office, on the question of compulsory health insurance (Wagner-Murray-Dingell National Health Act) is well known. On several occasions, most recently in September, 1948, he has called upon the Congress to enact legislation to provide compulsory health insurance for all the people in the United States.

Gov. Thomas Dewey spoke to the House of Delegates of the Oregon State Medical Association last May. Part of his address follows: "Compulsory socialized medicine is no good. It cannot be done. It would utterly destroy the quality of medical care—If a thing is evil, the first job is to convince people that it is evil and thoroughly evil. I am unalterably opposed to it."

Mr. Murray E. Thompson, Republican candidate for Governor of Missouri, stated that "I am not an advocate or supporter of socialized medicine and if successful in my candidacy, certainly will not in any way advocate 'socialized medicine.' "

TEN YEARS AGO

In writing about syphilis, Arthur W. Neilson, M.D., St. Louis and E. A. Belden, M.D., Jefferson City, say, "In this modern world of dramatic technical advancement, of high school graduates more sophisticated than many a Ph.D. of a half century ago, of moon rockets and miracle medicines, it is hardly conceivable that a communicable disease susceptible to relatively easy diagnosis and treatment should not have long since been eradicated. Yet, since 1958, syphilis has reversed its downward trend and with each passing year, the problem becomes greater and greater. Syphilis has invaded every age, sex and racial group, every geographical area—urban and rural."

The American Rhinologic Society presented an Honor Award Certificate of merit to Dr. Pat A. Barelli of Kansas City at the Academisch Liekenhuis, University of Leiden, Holland in July.

Members of Greene County Medical Society, who are graduates of the University of Missouri School of Medicine, held a surprise testimonial dinner at the Holiday Inn in Springfield on August 14 in honor of M. Pinson Neal, M.D., Columbia, who is finishing his long teaching career at the University of Missouri. Dr. Neal has been Professor of Pathology at the M.U. School of Medicine since 1922 and was acting dean of the School of Medicine from 1951 to 1953.

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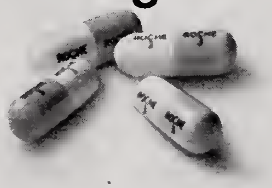

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Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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The Weight of Professional Opinion

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These professional and trade organizations are united in supporting antisubstitution statutes and regulations

The American Academy of Dermatolo

The Board of Directors of the American Academy of Family Physicians

The Executive Board of the American Academy of Neurology

The Committee on Drugs of the American Academy of Pediatrics

The American College of Allergists

The Executive Committee of the American College of Obstetricians and Gynecologists

The Board of Regents of the American College of Physicians

The Board of Trustees of the American Dental Association

The Board of Trustees of the American Medical Association

The American Psychiatric Associatio

The Executive Committee of the National Association of Retail Druggists

The Board of Directors of the Pharmaceutical Manufacturers Association

The National Wholesale Druggists' Association

nt Statement on Antisubstitution Laws and Regulations

The purpose of this statement is affirm the support of the participat- organizations for the laws, regula- ns and professional traditions which hibit the unauthorized substitution drug products.

Traditionally, physicians, den- s and pharmacists have worked operatively to serve the best inter- s of patients. Productive coopera- n has been achieved through tual respect as well as a common ncern for the ideals of public vice. This mutual respect has been lected, in part, by joint support er the years for the adoption and forcement of laws and regulations ecifically prohibiting unauthorized bstitution and encouraging joint cussion and selection of the urce of supply of drug products. e basic principles of medical, den- and pharmacy practice are thus ized and preserved in the interest patient welfare.

The antisubstitution laws have obstructed enhancement of the ofessional status of pharmacy any re than they have in and of them- ves guaranteed absolute protec- n from unsafe drugs, or freed ysicians, dentists and pharmacists m their responsibilities to patients. a practical matter, however, such s and regulations encourage inter- ofessional communications regard- drug product selection and assure ch profession the opportunity to ercise fully its expertise in drug age, to the advantage of patients.

Physicians and dentists should urged to increase the frequency d regularity of their contacts with armacists in selection of quality ug products, recognizing that economies to patients can be improved through such communication, taking into account the patients' needs. The pharmacist's knowledge of the chemical characteristics of drugs, their mode of action, toxic properties and other characteristics that assist in making drug selection decisions should be utilized to the fullest extent practicable by physicians and dentists in serving their patients.

Since drug product selection entails knowledge derived from clinical experience, the physician's and dentist's roles in product selection remain primary and do not permit delegation of decisions requiring medical and dental judgments. A broader role in therapy will evolve for pharmacists as improved understanding and cooperation among the professions continue to grow.

There has been no evidence that there are convincing reasons to modify or repeal existing laws and regulations prohibiting the unauthorized substitution of another drug product for the one specified by a prescriber. It is our belief that such laws and regulations merit the joint support of the medical, dental and pharmaceutical professions and the pharmaceutical industry.

Add your opinion to the weight of other professionals and send it to your state assemblyman or legislator.

P·M·A

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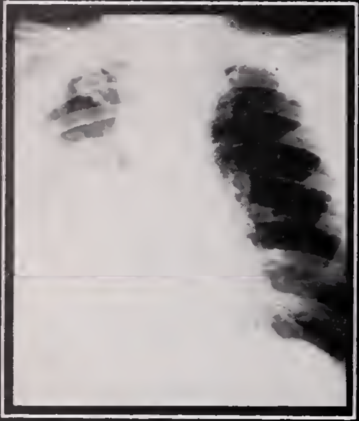

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MSMA
MISSOURI STATE MEDICAL ASSOCIATION
NEWS
ROUND-UP
DECEMBER, 1973

Physician fee hike ceiling set at 4%

Physicians will be permitted an annual aggreate fee increase of 4% under proposed Phase 4 gulations issued recently by the Cost of Living ouncil.

Although higher than the 2.5% ceiling allowed hysicians since 1971, the new proposed regulaons have already drawn the ire of the AMA and any other health-related organizations.

Under the proposed regulations:

- No fee over $10 can be raised by more than 0%.
- No fee under $10 can be raised by more han $1 in a single year.
- **The posting of an easily readible sign tating the availability of the physician's rice schedule is required. (One page of this ection can be clipped and used for such a ign.)**
- A schedule of base and current prices must e available upon request.
- Price increase entitlements may be accuulated from year to year.
- Profit margin may not increase for one year fter any price increase.

Final regulations will be effective Jan. 1, 1974.

The AMA has formally requested that physicians be exempted from all price controls under Phase 4.

In its request, the AMA stated:

1. Wages have generally increased at an annual rate of 6.8% since the beginning of Phase 2, while physicians' fees were limited to annual increases of 2.5%. Proposed Phase 4 regulations would continue to discriminate against physicians.

2. The proposed 4% limitation on fee increases is inadequate due to the rising costs incurred by physicians.

3. The profit-margin limitation is unfair and inequitable to physicians because physicians experiencing a growth in their practices are penalized.

4. Current and proposed price regulations prevent physicians with low fees from increasing them to prevailing levels in their community.

5. The regulations deny physicians the benefit of the small business exemption currently available to all industries except health, construction and petroleum.

Missouri abortion laws ruled unconstitutional

The U. S. Supreme Court recently rejected Misouri's challenge to the high court's decision grantng the right to abortions during the first six months f pregnancy.

The Supreme Court affirmed a district court's deision of last May which declared Missouri's aborion laws unconstitutional. In effect, that means Misouri is now operating under the guidelines set down y the Supreme Court in January, 1973.

These guidelines provide that (1) abortions in the irst three months of pregnancy are a matter to be ecided by the woman and her physician; (2) during he second three months states may step in to legisate health regulations such as procedure or places here abortions must be performed; and (3) only in he last three months may the state "go so far as to roscribe abortion . . . . except when it is necessary o preserve the life or health of the mother."

Missouri Attorney General John C. Danforth has said that there is no further appeal of Missouri's case. He has stated that he will continue to work for a constitutional amendment to the U. S. Constitution to protect the rights of unborn children.

The "Abortion-Conscience" bill passed by the last General Assembly and signed into law by the Governor is not affected by the Supreme Court's decision at this time.

This bill provides that no physician, allied health personnel or hospital is required to treat or admit any woman for the purpose of abortion if such treatment is against the policy of the hospital or against the religious, moral or ethical principles of the individual.

However, a suit has been filed in St. Louis which challenges the right of public hospitals to refuse to perform abortions. Results should be available in a few months.

Series to spell out PSRO provisions

Since the passage last year of the Professional Standards Review Organizations law (PL92-603), the implications of the new measure have led to much confusion. In an effort to clear the air on some of the provisions of the bill, MISSOURI MEDICINE will publish a monthly series of articles designed to spell out exactly what the bill says — without passing judgement.

The first installment is a simplified explanation of "What the Law Says About PSRO," published by the Medical Advances Institute of Columbus, Ohio. In future editions, questions and answers gleaned from PL92-603, other publications and those submitted by MISSOURI MEDICINE readers should make for interesting reading.

Purpose of PSRO's (Sec. 1151)

- To assure that health care services will conform to appropriate **professional** standards
- That services paid for will be medically necessary
- That inpatient services be utilized only when care cannot be provided more economically on an outpatient basis or in another facility

Qualifications of PSRO's (Sec. 1152)

- Nonprofit professional associations
- Composed of practicing doctors of medicine and osteopathy
- Organized to provide professional competence to review health care services
- Voluntary membership is to include a substantial proportion of area physicians (without requiring dues or membership in Medical Societies)
- No practicing physicians are to be restricted from serving as officers or restricted from the assignment of PSRO duties

Statewide PSRO Council (Sec. 1162)

- In any state where there are **more than two** PSRO's, the Secretary of H.E.W. may designate a Statewide PSRO Council
- Appointments to this council would then be made by the Secretary of H.E.W., the Governor of the State, the state hospital association and the state medical societies
- The state medical society under this provision, can designate only 2 council members (the minimum council membership is eleven)

Duties of the Statewide Council (Sec. 1162)

- "Coordinate the activities" of the PSRO's in the state
- Assist the Secretary of H.E.W. in developing uniform data systems and uniform operating procedures
- "Assist the Secretary in evaluating the performance of each PSRO"
- Assist the Secretary "in developing and arranging for a qualified replacement" PSRO

Designation of Area PSRO's (Sec. 1152)

- The Secretary of H.E.W. will designate PSRO "areas" by Jan. 1, 1974
- To apply, organizations within designated areas must submit formal proposals and
- Must demonstrate capability of performing activities of a PSRO "in an effective, timely, and objective manner and at reasonable cost"
- The secretary will first designate "conditional" PSRO's which, if they demonstrate capability, may be designated as the "area" PSRO prior to Jan. 1, 1976

Duties, Functions of Area PSRO's (Sec. 1155)

- Responsible for reviewing professional activities of physicians, hospitals, and other providers of health care services
- Determine whether such services are **medically necessary**
- Determine whether services meet professionally recognized standards of health care
- Determine whether inpatient services could be effectively provided in outpatient or other facilities
- Be responsible for the regular review of profiles of care and services
- Develop criteria relating to health care services by type of care or by diagnosis
- Determine whether care and services rendered are consistent with specified criteria
- Publish such criteria

Norms of Health Services (Criteria) (Sec. 1156)

- PSRO's shall apply "professionally developed norms of care, diagnosis and treatment"
- Criteria are to be based on **typical patterns** of practice within the PSRO region
- Principal points of evaluation and review include typical length-of-stay for institutional care by age and diagnosis
- Where norms of care in a PSRO area are significantly different from regional norms (and are found to be **reasonable**), the PSRO may apply the area norms with approval of the National PSRO Council

Prohibition Against Disclosure of Information (Sec. 1166)

- Information acquired in exercise of PSRO functions shall be used only to the extent necessary to carry out those functions
- Such information is to be held in confidence and "shall not be disclosed to any person"

Limitations on Liability (Sec. 1167)

- No person providing information to PSRO's shall be held to have violated any criminal law or be civilly liable under the law
- This provision applies to the PSRO organization, its personnel and to health **practitioners.**

HCFM and PSRO

PL92-603 changes aims of Foundation

by E. Mark Halvorson
Executive Vice President
Health Care Foundation of Missouri

A year has passed since President Nixon signed PL92-603, the federal PSRO law that requires physicians in each state to respond with organizaional concepts that broaden review processes and develops systems of economic as well as medical accountability.

It was this law, many remember, that physicians in Missouri were anticipating as early as August 1970, and which led the MSMA and the MAOPS to conjointly sponsor the Health Care Foundation of Missouri.

Goals Listed

In the three years of its existence, the HCFM has striven to develop a peer review mechanism n Missouri that would be the forerunner of a statewide Professional Standards Review Organization. In many ways it has succeeded. In some ways it has not. Its goals and objectives, however, have never been compromised, nor have they been modified or replaced. Today, as in August of 1970, the HCFM is still striving to protect and elevate the quality of medical care in Missouri; to discover and eliminate abuses within the health care system; and to seek to control the costs of medical care through appropriate educational programs.

It was felt in 1970 that physicians in Missouri would respond to the Foundation and what it was aspiring to do. Many did, and today the Foundation has over 2,700 physician members; it has processed hundreds of cases submitted by carriers, government agencies, the Blues, physicians themselves, and yes, even consumers and, in most cases, it has supported the physician's judgement.

Needed More "Clout"

The Foundation *has* succeeded but it has not succeeded as well as it could have if there had been even greater physician support or if there been enough financing to create the programs that would make it a resounding success. Strong physician support would have given the Foundation the "clout" necessary to construct contracts with carriers that would have brought eager cooperation from HIC, Division of Welfare and other intermediaries, and they would have been happy to aid financing Foundation programs.

Now, PSRO has introduced a new perspective and the thrust of this is on "local" area physician organizations instead of the statewide HCF in Missouri. The HCFM now urges physicians to create their own strong organizations in their respective areas, and is energetically helping them to do so.

As reported in the September issue of *Missouri Medicine*, the HCFM responded to "*PSRO Area Designation Guidelines*" by proposing that the original HCFM Peer Review regions, with minot modifications to accommodate physician preferences and Medicare intermediary boundaries, be accepted as the most appropriate definition of medical service areas in Missouri. This was Step 1 in the implementation of PL92-603, and current indications are that these boundaries will be designated as PSRO areas before January 1, 1974.

Seeks Role as PSAO

The Foundation also proposed that it be named the statewide PSAO (Professional Standards Administrative Organization) to coordinate and assist the work of each PSRO, in Missouri, to maintain a central computerized data service, and to develop appropriate physician and consumer education and information programs.

When the PSRO areas are officially designated, it becomes the responsibility of physicians in each area to develop an organization that can qualify as a PSR Organization. This is Step II in the implementation of PL92-603, and each such organization must be operative within a two-year period, or before January 1, 1976.

Then Step III goes into effect and the organization that has been formed and has proven itself capable of organizing review and reporting functions during the two-year "probationary" period will then become the "official" PSRO for that area on a one-year renewable contract basis.

Assist Area Organizations

Having proposed the PSRO areas for Missouri, the HCFM is now proceeding to encourage and assist physicians in these areas to develop organizations that will not only conform to the requirements of the law, but also will give them the "local" strength to interface collectively with carriers in a contractual basis. Since some form of organization must be created to accommodate PSRO, it is reasonable that this same organization should also address its expertise to the problems of private health insurance carriers and thereby permit physician influence and control to prevail over the entire health care delivery system in Missouri, and not just the 30% which pertains to Medicare and Medicaid.

The HCFM has engaged a consulting firm, Uni-Med Services, Inc., to assist in so doing, and through their efforts, the SEMOFMC (Southeast Missouri Foundation of Medical Care) and the MMHCF (Mid-Missouri Health Care Foundation) organizations are progressing rapidly. Similar steps are also being taken by physicians in Kansas City and St. Louis. Physicians in the Springfield area will be meeting soon to discuss their organizational approach.

And that's where the HCFM is now. It is acting as the statewide "preorganizer" of PSRO's and FMC's. It is still processing cases for Peer Review on a statewide basis until "local physician organizations" are formed. It still needs physician cooperation and support, and it still needs adequate financing. The HCFM urges all physicians in Missouri to repond to the need to develop local physician organizations that will, through their collective strength, provide a strong statewide review organization.

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The Council Reports

Meeting of Sept. 29-30, 1973

R. Allen Chandler, M.D., Kansas City, Chairman, called the meeting to order. Those present were Drs. Chandler; E. A. Stricker, St. James; James C. Cope, Columbia; John I. Matthews, Jefferson City; Donald R. Judd, St. Louis; Walter T. Gunn, St. Louis; John N. Martin, St. Joseph; Lysle M. Bach, Hannibal; Max S. Franklin, St. Louis; Louis P. Hetlage, Troy; Robert Bregant, Jefferson City; William D. Bradshaw, Clinton; Claude Cooper, Thayer; E. T. Hansbrough, Popular Bluff; Stanley S. Peterson, Springfield; J. Loren Washburn, Versailles; Hector W. Benoit, Jr., Kansas City; William D. Mayer, Columbia; R. K. Noback, Kansas City; M. Kenton King, St. Louis; Herbert R. Domke, Jefferson City; Richard P. Bowles, Liberty; Messrs. Lee E. Mortenson, Chicago, Ill.; Allen D. Smith, Kansas City; Hollister Smith, St. Louis; Ray McIntyre, Tom P. Fox, Royal O. Cooper and C. C. Swarens, Staff.

APPROVAL OF PREVIOUS COUNCIL MINUTES

Dr. Chandler called the meeting to order and requested approval of the minutes of the June 2-3, 1973 Council Meeting. On motion, duly seconded, the Council minutes of June 2-3, were approved as printed in the August, 1973 issue of Missouri Medicine.

EXECUTIVE SECRETARY'S REPORT

Mr. McIntyre indicated that the American Hospital Association is still trying to promote its Quality Assurance Program (QAP) and is holding regional meetings in order to acquaint people with its program and is trying to get backing. Such a meeting was held in Kansas City on August 15 and 16. Persons attending this meeting were from hospital associations, state medical associations, health departments, representatives of CME programs and others.

A meeting, held in Jefferson City on August 27 at the Ramada Inn, was called by the Regional Office, Department of HEW, to give organizations and individuals an opportunity to appear before this hearing and make recommendations on areas for PSRO designations. It was pointed out that the Health Care Foundation of Missouri made a recommendation which was supported by MSMA.

Mr. McIntyre stated that at the PSRO hearing, there were local medical groups who proposed five area PSRO designations. The first recommendation of the HCF was that it be designated as the PSRO for the state of Missouri. However, if there are local PSROs set up as presented, the HCF asked to be designated as the administrative coordinating agency for the entire state.

He said that Dr. Benoit would speak again on the PSRO hearing later in the meeting. Approximately 50 physicians from all over the state were present at this meeting. It was reported that Dr. Bauer had resigned as the Director of the PSRO section of HEW and a Dr. Simmons is acting in that position.

The Executive Secretary informed the Council that several staff members had been elected to offices of state organizations. Miss Jean Duensing, Managing Editor of Missouri Medicine, was recently installed as President of Missouri Press Women. About 175 women journalists belong to this organization and Jean was elected for a two-year term. We feel it is an honor to Jean and to the MSMA to have her in this capacity. A motion was made, seconded and carried that Jean be commended for her election to the presidency of this organization.

Royal O. Cooper has taken over the presidency of a newly formed organization—the Missouri Society of Association Executives. There is a national association, and there are two local societies in Missouri with which Allen Smith and Hollister Smith are affiliated. However, this is a newly organized state association spearheaded by Mr. Cooper. A motion was made, seconded and carried that commendation be granted to Royal for his election as President of MSAE.

M.D. Day at Missouri University will be on October 12-13. The MU-Nebraska football game is scheduled for October 13. The University of Nebraska Medical School will cooperate with the MU Medical School in presenting the scientific program for Friday.

Mr. McIntyre noted that Dr. Slickman, Speaker of the House of Delegates for the 116th Annual Session, was in attendance at the Council Meeting and welcomed him.

Mr. McIntyre pointed out that for the information of the Council there was a resolution in the folders having to do with the Missouri Psychiatric Association and their interest in having a resolution passed in the MSMA House of Delegates next spring which would provide for delegates from various specialty organizations of the state to be voting members of the MSMA House.

Dr. Domke was kind enough to arrange for the survey, "Physician Manpower for Missouri," to be published in the May issue of Missouri Medicine. The Division of Health financed this and it is the most up-to-date Missouri medical manpower survey available for today. We know that reports of this are being read as newspaper clippings from various parts of the state are citing statistics from the report.

Mr. Swarens attended a meeting of the State Medical Journal Advertising Bureau in Atlanta recently, along with Dr. Finnegan. Journal advertising was considered. This is becoming quite a problem. Journal advertising is more difficult to obtain and, at the same time, printing costs, postage, etc. are rising. Consequently, we are trying to keep informed on what different states are proposing.

A letter answering questions regarding Phase IV was sent out from the MSMA office along with one of the weekly issues of *AMA Newsletter* for posting on hospital staff bulletin boards.

Mr. Swarens indicated that October has been designated as Immunization Month in Missouri by Governor Bond. He pointed out that the current issue of *JAMA* has a good article on immunizations. The publicity will be aimed at parents, requesting them to call their physicians and bring their children up to date on their immunizations.

Mr. McIntyre reported that the Missouri State Board of Registration for the Healing Arts has denied Dr. Finch the right to take the examination for licensure. However, the administrative hearing commission ruled that the Board of Healing Arts is wrong and that Dr. Finch should be allowed to take the examination. Probably the Board will file suit to have the ruling declared invalid.

REPORTS OF DISTRICT COUNCILORS

District #2—Dr. Bach reported that he had recently attended a meeting regarding a commercial concern organization to run PSRO. He felt the tenor was that it had the approval of the Health Care Foundation of Missouri.

District #3—Dr. Franklin reported that he had attended the AMA Meeting in New York City. He indicated his Society's regret at the loss of Dr. Neilson and said that Dr. Robert Kelley had served as Dr. Neilson's replacement Delegate at the AMA Meeting.

The motion was made by Dr. Franklin that Dr. Robert Kelley be officially made an AMA Delegate to replace Dr. Neilson to Jan. 1, 1974. The motion was duly seconded and carried.

A motion was further made, seconded and carried that Dr. Hubert A. Ritter be appointed as Alternate Delegate to serve in that capacity to Jan. 1, 1974.

Dr. Franklin reported that the survey team from the AMA made its survey of the St. Louis Medical Society on September 16-19, and it seemed to go off very well. The annual pictorial roster of St. Louis Medical Society members has taken much staff time.

St. Louis Medical Society has voted to renovate its building rather than move. St. Louis Medical Society is raising its dues from $75 to $100 for the coming year.

Dr. Franklin indicated that, at the present time, his Society is not supporting the Open Panel Program of Blue Shield. Dr. Judd stated that the Society approved the concept, but is opposed to it on several grounds, the outstanding one being that if you are not a participating physician, Blue Shield will not pay either the patient member or the physician. It makes referral of patients very difficult.

District #4—Dr. Hetlage stated that in his personal conversations, he did not find overwhelming disapproval of the St. Louis Blue Shield Open Panel proposed program. He said that there was a good amount of physician input into this program and he could see reason for such further input.

In District #4, there is a crises of ambulance service. The undertakers will cease their ambulance service on January 1, and there will be no such service in Lincoln County. Dr. Hetlage indicated that he felt this is a serious medical problem and something needs to be done now.

Dr. Hetlage voiced his concern that as PSRO foundations, organizations, etc. are set up, the structure of medicine may very rapidly change if these organizations take over the functions of the district and county medical societies. There is concern that these foundations, etc. may be making the medical decisions.

District #5—Dr. Bregant reported that his district is addressing itself to PSRO and have been meeting with the UNIMED people. This area would conform with Region B of the Health Care Foundation of Missouri.

District #6—Dr. Bradshaw indicated that there are no serious problems in his district at the present time.

District #9—Dr. Cooper reported that he had attended a meeting of the South Central Counties Medical Society. They discussed PSRO and decided that they want to go along with the HCF. They discussed continuing medical education and the work of MMPAC. Dr. Cooper stated that they are beginning to feel that they will have to get involved.

Dr. Cooper also attended a meeting of the Mid-Missouri Medical Society. Dr. Stanley Peterson was the speaker and made a fine presentation. Mid-Mo is reactivating its Society. They have changed their Bylaws so they might admit D.O.s into the Society.

Dr. Cooper indicated that he hopes something will come out of the meeting regarding some direction on Phase IV. Mr. Swarens reiterated some of the points that are included in the letter sent from the MSMA office on Phase IV.

Dr. Hetlage indicated that he would like to see the D.O.s in his area attend the society and district meetings so that all physicians will be working in the same direction. Considerable discussion was held regarding this matter. Dr. Hetlage stated that what he is really interested in is for MSMA staff to contact the Missouri Association of Osteopathic Physicians and Surgeons to see if these is some way that the practicing D.O.s can attend medical meetings and still be in good graces with their own organization. He said that they have been invited to many of his local and district meetings, but do not attend, supposedly because of their fear of being disassociated from their parent organization.

District #10—Dr. Hansbrough indicated that he would like to discuss the PSRO hearing in Jefferson City. About half of the presentation time was used by Dr. Burford, Cape Girardeau, explaining the Southeast Missouri Health Care Foundation, which essentially takes in the 10th Councilor District. He presented slides and explained the reasons for pointing out this district. The SEMO Health Care Foundation is the only local foundation in Missouri which is off the ground and has a program to present. About 15 months ago, the Cape Girardeau County Medical Society hired UNIMED, a corporation which had set up a functioning foundation in Denver. They were successful in signing up health insurance companies for the Denver foundation program. The basic purpose is to reduce health insurance premiums through the Foundation's physician peer review program. To finance the Foundation's program, health insurance companies or other third party payers cooperating, pay the Foundation a certain percent of their contract premiums. They, thus, expect, through the Foundation's peer review program, to reduce their patient care cost. The experience has been that they can save about 12% over what has been expended before patient care came under the foundation. Of that amount, about 6% goes into the foundation for operating expenses. The Cape Society hired UNIMED to do a survey in Cape Girardeau County where there are about 60 doctors. The conclusion was that this was not large enough. UNIMED came back with the proposal that the areas be expanded. Other physicians in Southeast Missouri then became involved by contributing money to have UNIMED do a feasibility study of the entire area, which is the 10th Councilor District, plus Jefferson County, which is a large county physician-wise, and also included

Carter County which does not have a physician. This fills out the area and makes it possible to present maps showing that this is a functional area based upon trade routes, tradition, etc. There were 12 different ways in the presentation showing how this district was tied in as a unit. UNIMED concluded the study and said, indeed, this area is right for a rural health care foundation.

Dr. Hansbrough indicated that it was his understanding that as we go further along, cities may not get foundation approval in the future. The Bennett Amendment and probable HEW regulations seemed to make practical a PSRO area, since by including Jefferson County, there were 340 M.D.s and D.O.s in this area, which is Region E of the HCFM and identical to the 10th Councilor District. Immediately, the physicians in Southeast Missouri took up the idea.

Dr. Hansbrough stated that he felt that Dr. Burford's presentation at the PSRO hearing was thorough, complete and exceptionally well presented. At the encouragement of the Southeast Missouri group, other parts of the state are considering such feasibility studies by UNIMED.

The Executive Council of the Southeast Missouri foundation and the people doing the work, consist of each hospital sending a physician to be a representative on the Executive Committee of the corporation. Some of the smaller hospitals voiced concern that the larger hospitals and staffs would be telling the smaller ones what to do. However, they were assured that this would not be the case and they would have equal rights.

Dr. Hansbrough stated that there is a danger to this because these people have put so much time and work into this that, indeed, if there is a change in PSRO districts to allow state organizations as HCFM to do the whole job, perhaps the Southeast Missouri foundation will say, we would like to do ours, let them do the rest of the state. He stated that he is definitely enthusiastic about the Southeast foundation, but does not want to split the state. The physicians have indicated that they want to review only in their area and have the HCFM be the coordinator, since the word they now have from Washington is that a PSRO district will not be set up with more than 3,000 physicians.

Lengthy discussion followed regarding the pros and cons of such a foundation as explained by Dr. Hansbrough.

Mr. Mortenson indicated that as far as he knew, HEW has not officially discouraged the setting up of these foundations in a city area.

Dr. Hansbrough indicated that the cost of this to an individual family or the employer is an administrative thing and is being determined by UNIMED. They have indicated that they will need to operate this for two to three years at which time the help would be trained to carry on.

Concern was expressed over the fact that after these foundations have been set up, a time will come when the federal government will try to impose certain fee schedules, changes, etc. and we will be locked into a situation from which there is no escape, so there should be caution.

Further discussion followed regarding the Southeast Missouri Foundation. Dr. Hansbrough stated that he was a little disappointed in the fact that the *Journal* made practically no mention of the 45-minute presentation given at the PSRO hearing by the SEMO group.

Dr. Hansbrough reported that several months ago, several area physicians became interested in Comprehensive Health Planning and organized a Poplar Bluff Health Care Council. The first project was an approved ambulance training program in the junior college, which one of the physicians is teaching. Recently, a meeting was held to organize the Ozarks foothills into a B Agency under CHP. It is anticipated that the Poplar Bluff Health Care Council will organize a B Agency. Dr. Hansbrough indicated to the Council of MSMA that if you don't have a CHP agency in your area, get an organization set up to help the people in the area, but have definite medical input. This is so very important.

Dr. Hansbrough said that all of the undertakers in his area are going out of the ambulance business on January 1. Both Poplar Bluff and Cape Girardeau have private ambulance services. Some of the other counties are trying to have a working arrangement with these to go as far as 65 miles for ambulance service.

District #1—Dr. Martin indicated that the morticians are going to discontinue ambulance service in his area. However, they do have three ambulances, all run out of one of the hospitals. The problem has been the requirements to drive an ambulance. He further indicated that the morticians really tried to help the local people by getting out and pushing for a mill tax to support an ambulance service.

Dr. Martin reported that a local group has taken over Sisters' Hospital in St. Joseph. They have an administrator and a local Board and it seems to be going along well.

Dr. Martin indicated that St. Joseph is in dire need of an anesthesiologist and asked the Council to please indicate to him if they are aware of anyone looking for a location.

Dr. Martin stated that he does not feel we have the relationship at the state level with the AMA that we should have. We do not have enough input to the AMA on a daily or weekly basis and we do not get enough back from the AMA. We need closer relationship. I think Missouri and maybe every state should have a staff person who can go into the AMA office and secure needed information and come back to us with it. Not that Lee Mortenson doesn't give us good service. He covers three states. We need someone to go up there from time to time from our state organization to find out what is going on.

Dr. Martin indicated that he was very disappointed when attending the AMA meeting in the fact that when they voted for the Board of Directors, it was interesting that there was only one man running for every office and that was the one sitting at the head table.

Dr. Martin indicated that he has been asked by several people to see a financial report of the Health Care Foundation of Missouri and he has asked for one, but has yet to receive one. He said that he would like to see one.

District #8—In the absence of Dr. McAlhany, Dr. Peterson gave a brief report for District #8. A Councilor District meeting was held on September 20 in Springfield. Mr. Dave Weihaupt of the AMA office in Chicago was on the program, along with Dr. E. A. Stricker, President of MSMA. Mr. Weihaupt stated that PSRO is here and we should remember one basic thing—that it is a regulatory arm of the U. S. Government.

Dr. Peterson reported that one of the not-for-profit hospitals in Springfield was taken over by a for-profit organization and Blue Cross indicated that they could not pay for-profit organizations. Later, they indicated that they would not pay because Springfield had too many hospital beds anyway based upon the state plan

(Continued on page 834)

Recommendations[†] on Combination Live Virus Vaccines

American Academy of Pediatrics

Committee on Infectious Diseases

In the September 15, 1971 *AAP Newsletter* sent to Academy members, the Committee on Infectious Diseases of the American Academy of Pediatrics stated its recommendations on the use of combination live virus vaccines. After a careful review of available data, the committee concluded that:

- "This information indicates that the products are both safe and effective when used as directed."
- The vaccine "...can, therefore, be recommended with the obvious advantages of reduction in the number of injections for any given child and a concomitant decrease in the required visits to a physician's office or clinic."

United States Public Health Servic

Advisory Committee on Immunization Practices

In the April 24, 1971 issue of *Morbidit and Mortality Weekly Report,* the Advisory Committee on Immunization Practices of the United States Public Healt Service presented recommendations o the use of combination live virus vaccine The committee stated that:

- "Data indicate that antibody respons to each component of these combinatio vaccines is comparable with antibody response to the individual vaccines give separately.
- "There is no evidence that adverse reactions to the combine products occur more frequently or are more sever than known reactions to th individual vaccines (see pertinent ACIP recommendations).
- "The obvious convenienc of giving already selecte antigens in combined for should encourage consideration of using these product when appropriate."

[†] For complete text of both recommendations see your MSD representative or write to Professional Service Dept., Merck Sharp & Dohme, West Point, Pa. 19486.

M-M-R*

(MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE | MSD)

Single-dose vials

M-M-R, given in a single injection, fits easily into your routine immunization program for well babies.

Given at age 12 months, M-M-R provides for vaccination early in life against measles, mumps, and rubella.

MSD suggested immunization schedule for well babies

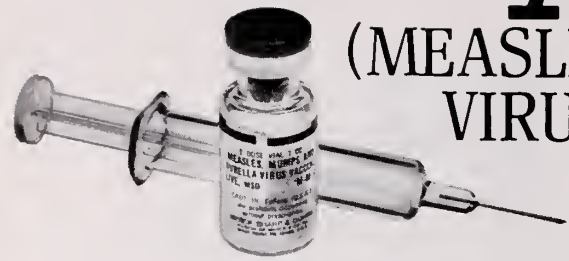
Age	Vaccine(s)
2 months	DPT (diphtheria-pertussis-tetanus) Oral poliomyelitis vaccine (triple)
3 months	DPT[1]
4 months	DPT Oral poliomyelitis vaccine (triple)
6 months	Oral poliomyelitis vaccine (triple)
12 MONTHS	**M-M-R (MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE, MSD)**

[1] This vaccination may be given at 3 months, 5 months, or at 6 months, depending on your preference or on the condition of the child.

Since vaccination with a live virus vaccine may depress the results of a tuberculin test for four weeks or longer, the test and the vaccine should not be given during the same office visit.

*Trademark of Merck & Co., INC.

For a brief summary of prescribing information, please see following page.



M-M-R

(MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE | MSD)

Single-dose vials

Contraindications: Pregnancy or possibility of pregnancy within three months following vaccination; infants less than one year old; sensitivity to chicken or duck, chicken or duck eggs or feathers, or neomycin; any febrile respiratory illness or other active febrile infection; active untreated tuberculosis; therapy with ACTH, corticosteroids, irradiation, alkylating agents, or antimetabolites; blood dyscrasias, leukemia, lymphomas of any type, or other malignant neoplasms affecting the bone marrow or lymphatic systems; gamma globulin deficiency, i.e., agammaglobulinemia, hypogammaglobulinemia, and dysgammaglobulinemia.

Precautions: Administer subcutaneously; *do not give intravenously.* Epinephrine should be available for immediate use should an anaphylactoid reaction occur. Should not be given less than one month before or after immunization with other live virus vaccines, with the exception of monovalent or trivalent poliovirus vaccine, live, oral, which may be administered simultaneously; vaccination should be deferred for at least three months following blood transfusions or administration of more than 0.02 ml immune serum globulin (human) per pound of body weight, or human plasma.

Due caution should be employed in children with a history of febrile convulsions, cerebral injury, or any other condition in which stress due to fever should be avoided. The physician should be alert to the temperature elevation which may occur 5 to 12 days after vaccination.

Excretion of the live attenuated rubella virus from the throat has occurred in the majority of susceptible individuals administered the rubella vaccine. There is no definitive evidence to indicate that such virus is contagious to susceptible persons who are in contact with the vaccinated individuals. Consequently, transmission, while accepted as a theoretical possibility, has not been regarded as a significant risk.

Attenuated live virus measles, mumps, and rubella vaccines, given separately, may temporarily depress tuberculin skin sensitivity; therefore, if a tuberculin test is to be done, it should be scheduled before vaccination, to avoid the possibility of a false negative response.

Before reconstitution, refrigerate vaccine at 2–8 C (35.6–46.4 F) and *protect from light.* Use only diluent supplied to reconstitute vaccine. If not used immediately, return reconstituted vaccine to refrigerator at 2–8 C (35.6–46.4 F), and discard after eight hours.

Adverse Reactions: To date, clinical evaluation has not revealed any adverse reactions peculiar to the combination. The adverse reactions that occurred were limited to those that have been reported previously for the component vaccines.

Fever, rash; mild local reactions such as erythema, induration, tenderness, regional lymphadenopathy; parotitis; thrombocytopenia and purpura; allergic reactions such as urticaria; arthritis, arthralgia, and polyneuritis.

Occasionally, moderate fever (101–102.9 F); less commonly, high fever (above 103 F); rarely, febrile convulsions.

Encephalitis and other nervous system reactions that have occurred very rarely with the individual vaccines may also occur with the combined vaccine. Experience from more than 44 million doses of all live measles vaccines given in the U.S. by mid-1971 indicates that significant central nervous system reactions such as encephalitis, occurring within 30 days after vaccination, have been temporally associated with measles vaccine approximately once for every million doses. In no case has it been shown that reactions were actually caused by vaccine. The Center for Disease Control has pointed out that "a certain number of cases of encephalitis may be expected to occur in a large childhood population in a defined period of time even when no vaccines are administered. A survey conducted in New Jersey in 1965 showed that 2.8 cases of encephalitis (of unknown cause) occurred per million children, ages 1–9 years per 30-day period." However, the Center for Disease Control has analyzed the reported reactions following measles vaccines and pointed out that "the clustering of cases in the period 6 through 13 days after inoculation as well as the recovery of measles virus (probably the vaccine strain) from the CSF of one patient does suggest that some of these cases may have been caused by the vaccine." The risk of such serious neurological disorders following live measles virus vaccine administration remains far less than that for encephalitis with measles (one per thousand reported cases).

Transient arthritis, arthralgia, and polyneuritis are features of natural rubella and vary in frequency and severity with age and sex, being greatest in adult females and least in prepubertal children. Such reactions have been reported with live attenuated rubella virus vaccines. Symptoms relating to joints (pain, swelling, stiffness, etc.) and to peripheral nerves (pain, numbness, tingling, etc.) occurring within approximately two months after immunization should be considered as possibly vaccine related. Symptoms have generally been mild and of no more than three days' duration. The incidence in prepubertal children would appear to be less than 1% for reactions that would interfere with normal activify or necessitate medical attention.

How Supplied: Single-dose vials of lyophilized vaccine, containing when reconstituted not less than 1,000 TCID_{50} (tissue culture infectious doses) of measles virus vaccine, live, attenuated, 5,000 TCID_{50} of mumps virus vaccine, live, and 1,000 TCID_{50} of rubella virus vaccine, live, expressed in terms of the assigned titer of the FDA Reference Measles, Mumps, and Rubella Viruses, and approximately 25 mcg neomycin, with a disposable syringe containing diluent and fitted with a 25-gauge, ⅝″ needle. Also in boxes of 10 single-dose vials nested in a pop-out tray with a separate box of 10 diluent-containing syringes.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486.

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County Society News

FIRST DISTRICT

COUNCILOR
JOHN N. MARTIN, M.D., ST. JOSEPH

Buchanan County Medical Society

For the 18th consecutive year, physicians and attorneys in St. Joseph met jointly when 90 members of the Buchanan County Medical Society and the St. Joseph Bar Association attended a dinner and program in the Empire Room of Hotel Robidoux.

Dr. Elza F. Butler, president of the Medical Society, and Mrs. Milton (Grace) Day, president of the Bar Association, presided jointly and extended greetings to those in attendance.

The speaker for the event was Sixth District Congressman Jerry Litton of Chillicothe, who is serving his first term in Congress.

Dr. Gerald E. Fox and J. William Roberts, program chairman for the two professional groups, made arrangements for the meeting.

TENTH DISTRICT

COUNCILOR
EUGENE T. HANSBROUGH, M.D.,
POPLAR BLUFF

Butler-Wayne-Ripley Medical Society

The Butler-Wayne-Ripley Medical Society elected new officers at a meeting at the Hickory House in Poplar Bluff on October 9.

Officers elected to take office in January, 1974 are Dr. Ricardo Ramirez, President; Dr. Tom Wood, Vice-President; Dr. D. K. Varma, Secretary; and Dr. Robert Laatsch, Treasurer.

Delegates to the MSMA Annual Session are Drs. Eugene Ruff, George Ladyman and Fred Caldwell. Alternate Delegates are Drs. Austin Tinsley, S. R. Reddy and Ben Till.

Dunklin County Medical Society

Dr. Romeo I. Santos, Kennett, was elected President of Dunklin County Medical Society at its meeting on October 15. He succeeds Dr. W. D. English, Cardwell.

Other new officers elected for 1974 are Drs. Chester R. Peck, Kennett, Vice-President; Quinton Tarver, Secretary-Treasurer; and George Q. Dunmire, Delegate to the MSMA.

Dr. John K. Legan was elected Alternate Delegate and Dr. Chester R. Peck was elected to a three-year term as Censor.

St. Louis Blue Shield Modifies Open Panel Program

The Areawide Open Panel program proposed for St. Louis Blue Shield has been modified in an important respect, according to a recent announcement by Dr. James C. Sisk, Chairman of the Board of Trustees of the Plan.

The original proposal advanced last June stipulated that benefits would not be paid for the services of a physician who had not signed an agreement of participation in the plan. In response to reaction within the medical profession against this aspect of the program, Dr. Sisk said, the Blue Shield Board of Trustees voted in October to change the terms to provide for payment to the member of benefit amounts based on the usual, customary and reasonable charge concept when covered services are received from a nonparticipating physician.

With the modification, the Open Panel program still retains its broad scope of coverage, providing benefits for a wide range of professional services, including care in the physician's office or patient's home. Advocates of the plan list the provision of benefits for out-of-hospital services as one of its most significant features.

The Areawide Open Panel is a pilot experimental plan based on a fundamental private physician "fee for service" approach. Intended as a side-by-side offering with regular Blue Shield programs as an optional choice within employee groups, it is designed to permit compilation of statistical data on "fee for service" practice for comparison with information on salaried group practice and HMO arrangements. This could and should show that "fee for service" will remain a viable delivery system, Dr. Sisk said.

Letters have been mailed to all physicians in the St. Louis Blue Shield area explaining the new provision of benefits for services of non-participating physicians and urging participation in the program. Dr. Sisk stressed the point that the plan cannot be marketed until a substantial majority of area physicians have agreed to participate by signing and returning the agreement card enclosed in the mailing.

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This patient
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It took just one short visit.

*Urethritis, cervicitis, proctitis when due
to susceptible strains of *N. gonorrhoeae*

he Upjohn Company J-3437-6

Trobicin—The advantage of injectable therapy.
Once Trobicin is injected, treatment is usually complete; there can be no problems with patients sharing, skimping, skipping or forgetting medication.

Trobicin—The aspect of privacy.
There are no prescriptions to fill, no capsules to take. Neither family, friends nor co-workers need know or suspect the patient's problem.

Trobicin—Indication and dosage.
Spectinomycin is indicated only for use in acute urethritis and proctitis in the male and acute cervicitis and/or proctitis in the female when due to susceptible strains of *N. gonorrhoeae*. The usual dosage for Trobicin in adult males is 2 grams intramuscularly[†]; 4 grams intramuscularly in females.

Trobicin—Not effective for syphilis.
Trobicin is not effective for any stage of syphilis. Trobicin may mask or delay the symptoms of incubating syphilis. If concurrent syphilis is suspected, follow the patient serologically for at least 3 months. Patients with syphilis should receive adequate specific anti-syphilitic therapy with an appropriate antibiotic. Trobicin is contraindicated in patients previously found hypersensitive to it.

Intramuscular
.and **Trobicin**® 2 gm and 4 gm vials
sterile spectinomycin hydrochloride

rile Trobicin
ile Trobicin (spectinomycin hydrochloride) or Intramuscular Injection:
m vials containing 5 ml when reconstituted diluent.
m vials containing 10 ml when reconstituted diluent.
aminocyclitol antibiotic active *in vitro* against t strains of *Neisseria gonorrhoeae* (MIC 7.5 0 mcg/ml). Definitive *in vitro* studies have wn no cross resistance of *N. gonorrhoeae* ween spectinomycin and penicillin.

ications: Acute gonorrheal urethritis proctitis in the male and acute gonorrheal icitis and proctitis in the female when due susceptible strains of *N. gonorrhoeae*.

ntraindications: Contraindicated in pa- ts previously found hypersensitive to spec- mycin.

arnings: Not indicated for the treatment of hilis. Antibiotics used to treat gonorrhea y mask or delay the symptoms of incubating hilis. Patients should be carefully examined monthly serological follow-up for at least nonths should be instituted if the diagnosis of syphilis is suspected.
Safety for use in infants, children and pregnant women has not been established.

Precautions: The usual precautions should be observed with atopic individuals.
Clinical effectiveness should be monitored to detect evidence of development of resistance by *N. gonorrhoeae*.

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.
During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemoglobin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single- and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25° C and use within 24 hours after reconstitution with diluent.
Male—Inject 5 ml intramuscularly for a 2 gram dose. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.
Female—Inject 10 ml intramuscularly for a 4 gram dose.

How supplied: *Vials, 2 and 4 grams—with ampoule of Bacteriostatic Water for Injection with Benzyl Alcohol 0.9% w/v.* Reconstitution yields 5 and 10 ml respectively with a concentration of 400 mg spectinomycin per ml (as the hydrochloride). For intramuscular use only.
Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae*.
Caution: Federal law prohibits dispensing without prescription.
For additional product information see your Upjohn representative or consult the package insert.

Upjohn MED B-5-S (MBR-1)
The Upjohn Company, Kalamazoo, Michigan 49001

or patients with gonorrheal proctitis and for patients in geographic areas where antibiotic sistance is known to be prevalent, initial treatment with 4 grams is preferred.

WASHINGTON

The debate concerning the right of large states to establish statewide Professional Standards Review Organizations (PSROs) apparently has come to an abrupt halt with the government saying "no" in a loud and clear voice.

The Department of Health, Education and Welfare announcement came only ten days after it had released a statement that said under certain circumstances, it would consider naming a statewide PSRO in big states where there is support for it among the interested medical and health groups.

Though an about-face was denied by Henry Simmons, M.D., Deputy HEW Assistant Secretary for Health and acting head of PSRO, there was an apparent conflict between the statement given earlier to the PSRO Advisory Council and the final decision.

The designated PSRO areas which will be announced by late November or early December will include no area having many more than 3,000 physicians within it, Dr. Simmons told a news conference in his office. He conceded that there is no such limitation in the PSRO law, but the 2,500-physician level suggested in the report by the Senate Finance Committee was "reasonable" but not "rigid."

The area selections will be in the form of proposals printed in the Federal Register giving interested parties 30 days in which to comment. The possibility remains that some changes could be made before the designations become final, but Dr. Simmons did not talk as if there were much chance of that happening.

In the earlier statement given the Advisory Council, Dr. Simmons said: "There are a few states with a larger number of physicians that have requested that they also be designated as single state PSROs and have obtained backing of their medical, osteopathic and hospital associations and, in some instances, government. In such instances, we will individually consider designation of a statewide PSRO if the statewide PSRO has support of physicians throughout the state and agrees to further subdivide itself . . . and if control of the review process remains at the local levels. . . .

"Thus, in states with a large number of physicians which nevertheless opt for a statewide PSRO, it is clear that the review of care would be controlled and performed locally. . . ."

Members of the Council interpreted this as indicating that HEW in some cases might okay a statewide PSRO in large states.

Dr. Simmons also told the news conference that guidelines will be issued in February on how organizations can apply to become PSROs within the designated areas. By next June, he said, the hope is to have 50 PSROs chosen. Within four to six weeks, a PSRO bulletin will be sent to all physicians in the nation outlining the status of the program and informing them of PSRO developments.

He predicted that from 20 to 30 small states will be single-state PSRO areas.

PSRO, said Dr. Simmons, is "probably the most sensitive program that has been mandated" for the medical profession "and one of the most important ever passed in terms of impact upon the profession and benefit to the public."

He praised the AMA for "very constructive steps" in developing diagnostic standards for PSRO and "very constructive work in general" with HEW in gearing up for the program. He conceded a difference of opinion with the AMA on the extent to which PSROs would function at the state level.

* * *

Prior to the HEW decision against statewide PSROs in large states, the Senate Finance Committee had tentatively approved a provision that would ban HEW from using a limitation on the number of physicians that may belong to a PSRO.

If enacted, the provision could make it easier for statewide PSROs to win HEW approval.

At present, the Department is employing a general top limit of 2,500 physicians per review organization, a maximum guide that obviously would foreclose larger states from having a single organization to review institutional care for Medicare and Medicaid patients.

The amendment was sponsored by Sen. Lloyd Bentsen (D.-Texas) and agreed to by Sen. Wallace Bennett (R.-Utah), originator of the PSRO concept and a staunch proponent of smaller PSRO units.

The language of the proposed Bentsen amendment reads: "In carrying out the provisions of this section, the Secretary may designate, as an appropriate area with respect to which a Professional Standards Review Organization may be designated, an area encompassing a whole State; and the Secretary shall not refuse to designate any qualified organization as the Professional Standards Review Organization with respect to such area solely because of the number of physicians participating in such Organization."

Whether or not the Senate committee action on a House-passed measure making technical changes in the Social Security Law would result in a significant change in HEW PSRO policy is not known at this time.

* * *

The present Congress won't act on a full-scale national health insurance program, predicts Sen. Wallace Bennett (R.-Utah).

Bennett, top Republican on the Senate Finance Committee which has jurisdiction over NHI, said such a national program would require new taxes to finance it.

"Congress is keenly aware of a strong and growing resistance to any increase in taxes for any purpose," he said. "To complicate the situation further, there is a real rivalry between the Administration and the Congress as to which can demonstrate the greatest fiscal responsibility.

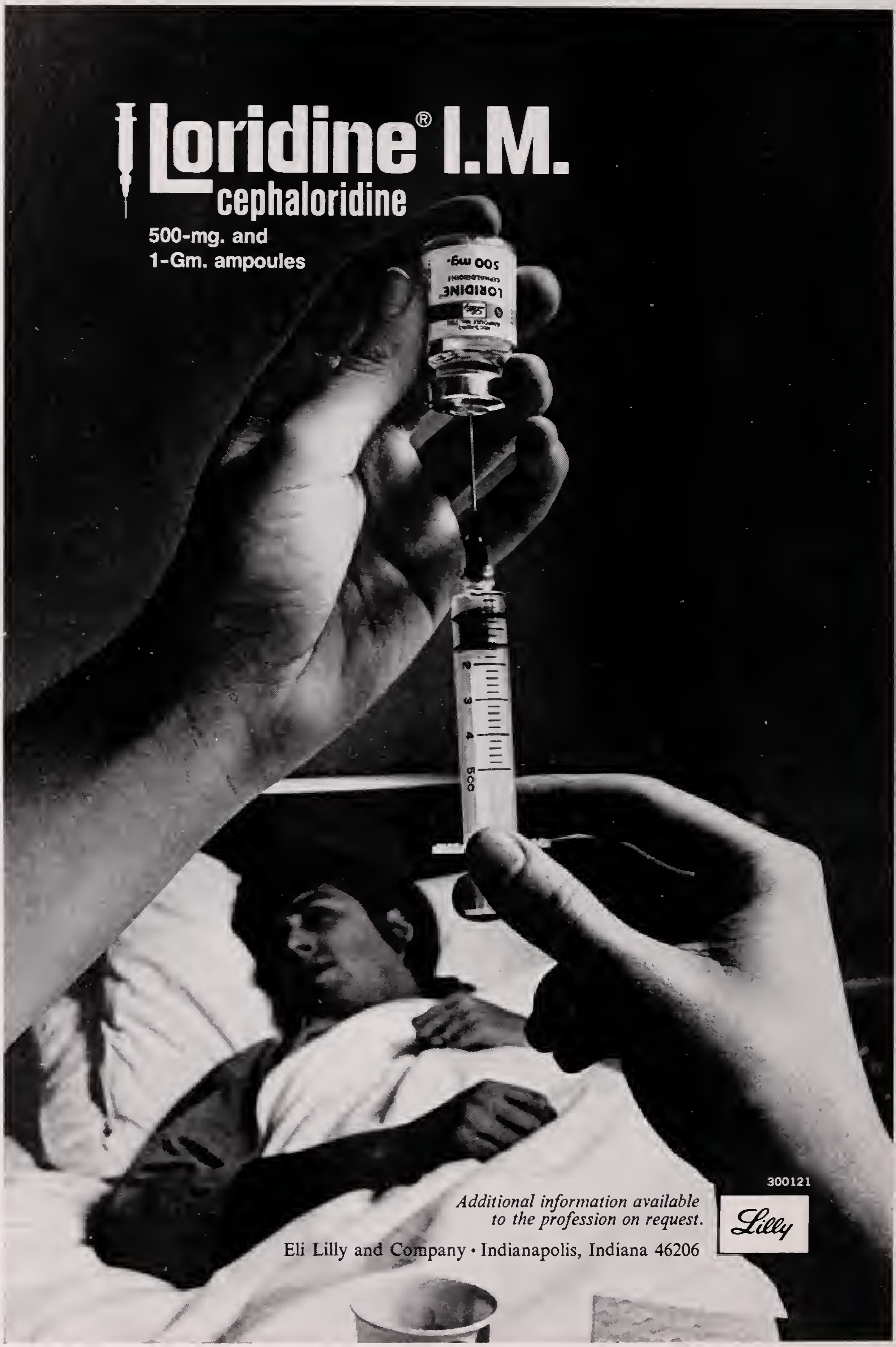
"I don't believe the people really realize just how great the added tax burden must be to provide the billions needed to support some of the large-scale programs which have been proposed," Bennett said, adding that a health care bill sponsored by Sen. Edward Kennedy (D.-Mass.), would cost "an estimated $70 billion."

Although ruling out the possibility of Congressional action on a full-scale national health insurance program, Bennett said it was possible that Congress might act on "some limited type of catastrophic health insurance coverage and improvements in Medicaid."

The Senator was referring apparently to the bill introduced by Finance Committee Chairman Russell Long (D.-La.) and Sen. Abraham Ribicoff (D.-Conn.) recently for a Social Security-financed catastrophic plan and federalization of Medicaid.

Continuing Education Coming Events

Dec. 7-8	**The Long Weekend: Infectious Disease, Pulmonary Disease** University of Missouri-Kansas City School of Medicine and Kansas City Southwest Clinical Society Crown Center Hotel, Kansas City
Dec. 7-8	**Annual Scientific Meeting** Kansas City Society of Ophthalmology and Otolaryngology Plaza Inn, Kansas City
Jan. 25-26 (1974)	**The Long Weekend: Immunology, Hematology** University of Missouri-Kansas City School of Medicine and Kansas City Southwest Clinical Society Crown Center Hotel, Kansas City
Jan. 25-26 (1974)	**The Long Weekend: Immunology, Hematology** University of Missouri-Kansas City and Kansas City Southwest Clinical Society Crown Center Hotel, Kansas City
Jan. 31-Feb. 1 (1974)	**Symposium: Diagnostic Cytology** Postgraduate Medical Education, K. U. School of Medicine Kansas City, Kan.
Feb. 6 (1974)	**Seminar: Early Detection and Treatment of Carcinoma of The Breast** The Ed Bixby Institute for Postgraduate Medical Education Research Hospital and Medical Center Kansas City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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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J. C. ELLSASSER, M.D., PETER E. PETERS, M.D.
and* T. W. STAPLES, M.D., *St. Louis

Post-Traumatic Cyst of the Sacrum

Case Report

Destructive lesions other than chordomas and metastases are relatively uncommon in the sacrococcygeal region. As a further contribution to the differential diagnosis of expansile destructive lesions of the sacrum, the case report of a patient with a cyst of the sacrum following trauma is presented.

Case Report

A 36-year-old white man was referred from an outside hospital for evaluation of a tumor of the sarcum which was detected radiologically three weeks prior to admission. For six months, he had had low back pain with intermittent numbness of the entire right leg which developed after he had lifted heavy molds at work. He gave a history of "some type of pelvic fracture" in 1960 or 1961. He was hospitalized for several weeks as a result of this injury. In the intervening time, he had had no complaints relative to his back or pelvis. On physical examination, range of motion of the back and the hip joints was normal. There was an area of localized tenderness over the lower sacrum and the coccyx. On rectal examination, a presacral fullness not involving the bowel was noted. Neurologically, no sensory or motor defects were present. His reflexes were normal. Serum calcium, phosphorus and alkaline phosphatase levels were within normal limits.

Radiologic examination, including laminography, revealed an expansile lesion involving the lower portion of the sacrum (Fig. 1). The border was well defined by a thin rim of ossification. The mass displaced the colon anteriorly 4.5 cm. The greater portion was located on the right side, but it also extended anteriorly and posteriorly and across the midline. The coccyx was unremarkable. Comparison films taken nine months previously showed no interval change. A myelogram revealed no communication with the mass. There was a small anterior midline bulge at L4-L5. The chest film was normal.

At operation, a considerable amount of mature bone was found at the right posterior aspect of the sacrum. Anteriorly, a large cavity containing a few fine trabeculae of bone and no fluid was entered. During curettage, brisk bleeding from bone occurred. Histologic sections showed irregular spicules of cancellous bone and scattered areas of fibrocarti-

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As a further contribution to the differential diagnosis of expansile destructive lesions of the sacrum, the authors present this case report of a patient with a cyst of the sacrum and a history of pelvic trauma ten years prior to biopsy. They include a discussion of biopsy, history and x-ray findings and a brief review of the literature on the subjects of post-traumatic cyst formation in bones and tumors of the sacrococcygeal area. Dr. Ellsasser is from the Division of Orthopedic Surgery and Drs. Peters and Staples are from the Mallinckrodt Institute of Radiology, Washington University School of Medicine.

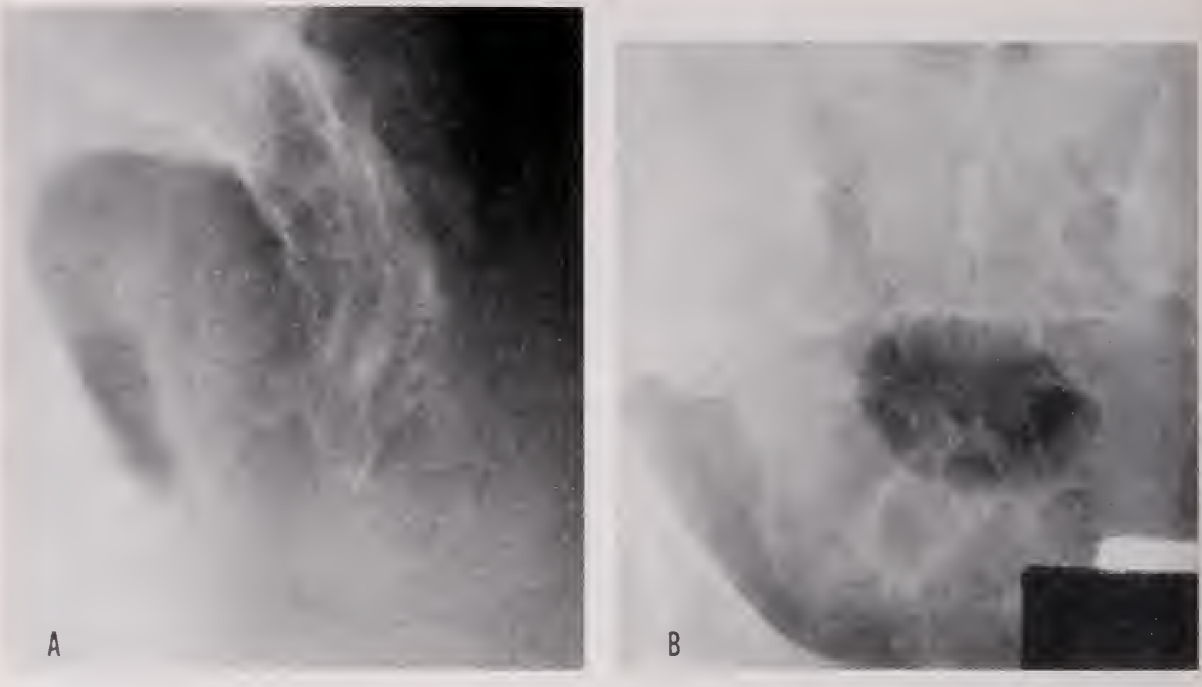

Fig. 1 The lateral x-ray of the sacrum (A) demonstrates an expansile, well-defined lesion extending anteriorly and posteriorly The rectum is displaced by the mass. The anterior-posterior view of the sacrum (B) shows a bulging right lateral border with asymmetry of the right third and fourth sacral foramina.

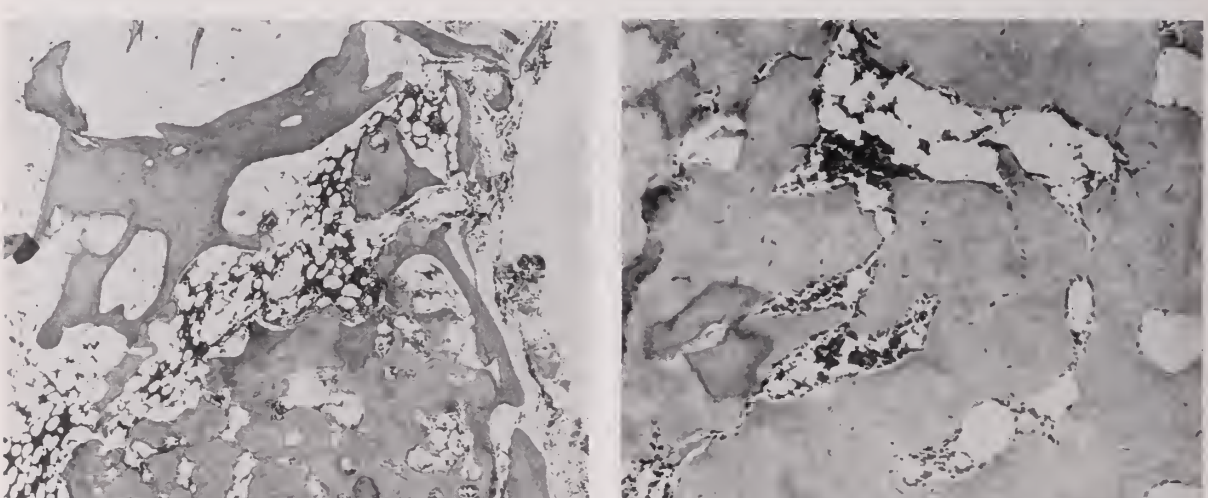

Fig. 2 A low-power view of the biopsy specimen (A) shows spicules of cancellous bone, benign fibrocartilage and vascular spaces. (B) Higher power view of the fibrocartilage.

lage without evidence of neoplasia. There was no evidence of aneurysmal bone cyst or tumor (Fig. 2). This histologic appearance is compatible with a reactive process and is consistent with previous trauma. Although various etiologies might be responsible for this nonspecific reactive picture in bone, it is surmised that the patient's preceding injury was responsible for the changes.

Follow-up films six months after biopsy revealed no interval change. The patient remains well two years after biopsy.

DISCUSSION

Post-traumatic cyst formation in long bones has been described either as "ossifying subperiosteal hematoma"[1] or as "post-traumatic periostoma."[2] Radiologically, these cysts are eccentric in position and the underlying bone cortex shows little or no involvement. They occur after severe trauma, usually without but sometimes with fracture of a long bone, simulating the radiographic appearance of an aneurysmal bone cyst.[3] On the other hand, several cases of histologically documented aneurysmal bone cyst have been described with a definite history of trauma to the involved region.[4] Post-traumatic bone lesions having the roentgenographic and microscopic appearance of unicameral bone cysts also have been reported ("post-hematoma cyst").[5] The common etiology of these cystic bone changes following trauma appears to be subperiosteal or intramedullary hemorrhage. In fact, Cottier was able to produce cystic bone formations in experimental animals by subperiosteal injection of blood.[6]

Several attempts were made to obtain the x-rays or the reports from this patient's original injury in 1960 or 1961. No information was available. It is postulated that the injury most likely was a transverse fracture of the sacrum since no other residual pelvic deformity is present.

Radiographic differential diagnostic considerations in this case included aneurysmal bone cyst, giant cell tumor and chordoma. While aneurysmal bone cysts can occur in almost any bone of the skeleton, the sacrum is an uncommon site.[7] Giant cell tumors arise more often in the sacrum. Of 218 cases, 11 (5%) were located in this region.[8] Forty-five percent of chordomas involve the sacrum.[9] An important clinical consideration is the possibility of an anterior meningocele. Inadvertent entry into the lesion at surgery has led to fatal meningitis.[10] Myelography should be done to determine any communication between the subdural space and the cystic structure prior to biopsy.

SUMMARY

A case of a cyst of the sacrum following trauma is reported. The differential diagnosis of sacral tumors is briefly discussed.

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Reprints: *James C. Ellsasser, M.D.*
Dept. of Surgery
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SIDNEY RUBIN, M.D., RODGER LAMBIE, M.D.,
EDWIN HERMAN, M.D. *and* LUZVIMINDA SICAT, M.D., *Kansas City*

Radiologic Problem Case

A 60-YEAR-OLD WHITE MAN sought medical consultation when he noted progressive difficulty in breathing.

Current History: The present illness was of short duration, occurring over a period of four months. He was first aware of some minimal respiratory problems when he was troubled with a persistent cough. On Oct. 16, 1972, he visited his physician, who detected some rhonchi in the basilar portions of his lungs. The patient smoked one package of cigarettes per day and was advised to curtail his smoking until further follow-up evaluation. In the interim, a chest roentgenogram (Fig. 1) made during the October visit was compared to a normal routine chest film (Fig. 2) that had been taken prior to the present complaint.

The chest radiograph revealed patchy areas of opacification in the lateral basilar portions of the lungs. These small areas were no larger than the size of a quarter and were confined to the costophrenic regions. There was no obliteration of the sulci and the heart and great vessels appeared normal. The roentgen observations were explained on lack of deep breathing and the fact that patchy areas of atelectasis (plate-like) were present in the bases of both lungs.

The patient's condition did not improve with symptomatic therapy. Since dyspnea increased rather than regressed, a repeat film was taken on Nov. 11, 1972 (Fig. 3). At this examination, the roentgen observations were more marked with linear areas of interstitial opacification and

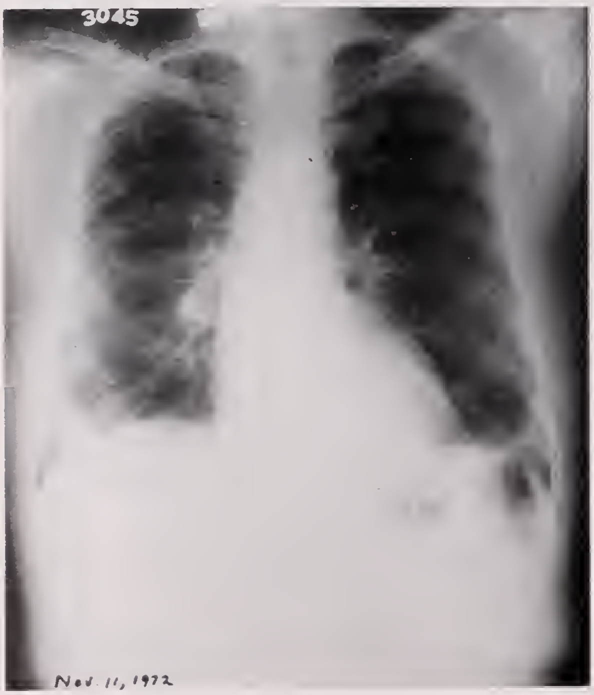

Fig. 1 Infiltrate is observed in lower lung fields. The symmetry and lateral position of minimal density suggested an area of poor aeration associated with limited diaphragmatic excursion.

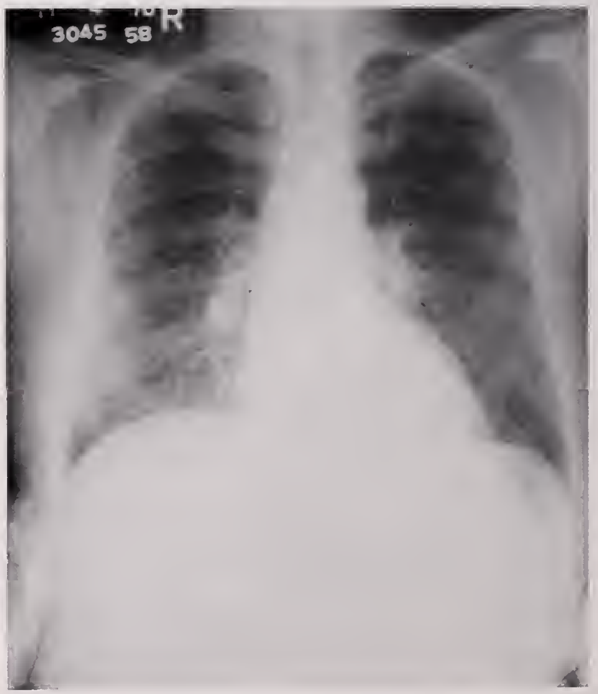

Fig. 2 A routine film made on Nov. 4, 1972 is normal. The lung fields appear clear with no basilar abnormalities. The vascular markings are normal. The right infrahilar density is due to a calcified gland.

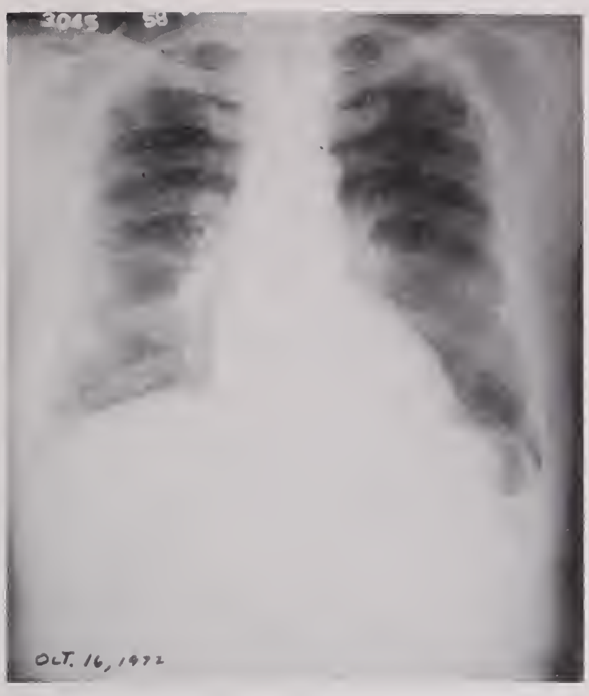

Fig. 3 The film, taken on Nov. 11, 1972, reveals the increased striation at the bases. This is bilateral, but most marked on the right. The densities have the appearance of Kerley B lines.

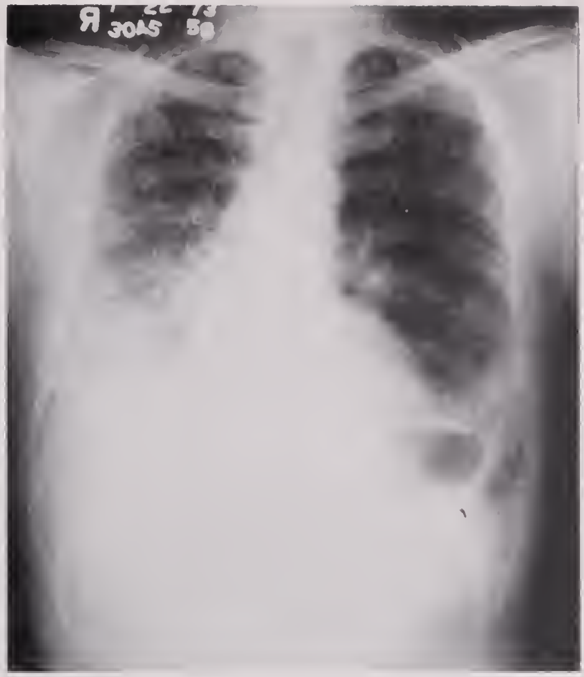

Fig. 4 The interstitial nature of the disease is manifest by the honeycomb appearance of the lung field on the left. The homogeneous nature of the pattern on the left is more alveolar in character.

basilar infiltration. The linear striation was most marked in the right infrahilar region.

Although physical activity evoked greater difficulty in breathing, the patient refused hospitalization, concluding that he had merely contracted a respiratory infection. He decided upon a vacation and departed immediately to an area of warm climate.

He returned from his vacation in January, 1973 after several weeks of unrelenting pulmonary symptoms. During this period, he developed a pruritic rash that covered his face and extremities. The rash subsided temporarily and, subsequently, recurred after a brief course of steroids. A chest film (Fig. 4) made on January 23 revealed marked extension of the disease process, so he returned to Kansas City with evidence of progressive pulmonary disease.

He was partially debilitated, being able to walk less than ten steps before experiencing marked dyspnea. Therefore he was incapable of conducting his business. He finally agreed to hospitalization in February, 1973.

Past History: The past history was noncontributory although the patient had experienced an acute myocardial infarction two years prior to this event. He recovered completely from his myocardial infarct.

The family history was of no significance in regard to the recent disease.

Physical Examination: The patient appeared to be acutely and chronically ill. He was quite dyspneic upon the slightest exertion. There was a generalized psoriatic rash on his face, hands and upper extremities. The lungs were filled with crackling sounds on ausculation, and percussion elicited dullness at the bases. The heart sounds were distant and there was tachycardia. The other systems were normal, and no findings were observed that were relevant to the pulmonary impairment.

Laboratory Data: An SMA-12 done on Feb. 1, 1973 revealed an elevated LDH of 300 Mu/ml (normal is 200 Mu/ml). The BUN, uric acid,

The authors of this series of articles presenting unusual radiologic problem cases are from the Department of Radiology, Menorah Medical Center, where Doctor Rubin is Chairman. In this case, they were assisted by Luzviminda Sicat, M.D., Resident in Radiology, and Marvin Kahn, M.D., Internist and pulmonary specialist.

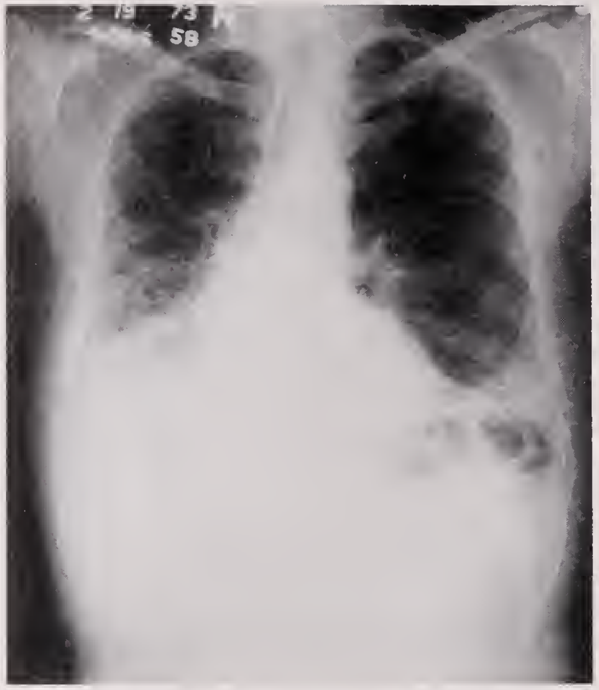

Fig. 5 On Feb. 19, 1973, approximately one month prior to the patient's death, the reticulated pattern becomes more apparent. The honeycomb nature of the interstitial process is even more apparent. The disease has progressed to involve all of the right lung. The left lung is less involved.

albumin and total protein were normal.

The hemoglobin level was 12.8 gm/100 ml with a hematocrit reading of 41%. The white blood cell count was 8,100/cu mm on February 1. A repeat count on February 5 revealed 12,400/cu mm. There were 62% polys, 12% stabs, 17% lymphocytes and 9% monocytes. The platelet count was 465,000/cu mm. Na and K were 137 mEq/liter and 3.9 mEq/liter, respectively. The chlorides were 104 mEq/liter, which is within normal limits.

The pulmonary function studies were most revealing with a PO_2 of 65 mm Hg and oxygen saturation of 89%. The pH was 7.44, the upper limits of normal.

PCO_2 was 37 mm Hg (normal 33-47 mm Hg) with the HCO_3 measuring 24 mEq/liters (normal 22-30). The total CO_2 was within the normal range of 25. The base excess was −1.2 mEq/liter.

Radiological Diagnosis: Since the x-ray diagnosis is not specific in diffuse interstitial fibrosing pulmonary disease (Fig. 5), one can only arrive at a differential diagnosis by clinical and laboratory manifestations. In the differential diagnosis, one must consider histiocytosis,[1] histoplasmosis, sarcoidosis, amyloidosis, tuberculosis or lymphangitic carcinoma as just a few of the conditions that might produce the honeycomb pattern of fibrotic disease. The lack of specificity[2] in the laboratory data and the clinical picture strongly favored the so-called "Hamman-Rich Syndrome,"[3] and a biopsy was suggested.

Pathology Report: Fragments of dense collagenous connective tissue, presumably representing thickened pleura, were noted. Chronic inflammation and collections of connective tissue were evident. Proliferation of alveolar pneumocytes was observed and irregular areas of fibrosis were seen throughout. There was no evidence of granuloma or vasculitis.

Diagnosis: Nonspecific interstital fibrosis with proliferation of alveolar pneumatocytes.

Findings were consistent with interstitial pulmonary fibrosis and desquamative pneumonitis.

Impression: Hamman-Rich type of fibrotic disease.

Discussion: Hamman and Rich[3] described a disease which was originally considered to be quite specific and which manifested itself by an insidious onset of general malaise, fever, occasional dry cough, chest pain and progressive and fatal dyspnea.

Today, this obscure disease is considered to be nonspecific, and etiology of the fibrosis is obscure. It is possible that this represents a tissue response to multiple agents (antigens). In the original treatise on this disease entity, the patient presented with a subacute or chronic pattern. This slowly progressed over several months and eventuated in death.

In recent years, a more acute disease process has been described and named *desquamative interstitial pneumonia* (DIP).[4] DIP is believed to represent an early but transitional state of a disease complex which culminates into interstitial fibrosis.[5] Fibroblastic proliferation in the alveolar wall, edema and cellular infiltration (plasma cells and lymphocytes) create an interference which results in diffusion impairment, thereby modifying respiratory gaseous exchange.

In DIP, an area of infiltrate is first noted in the bases, laterally. This opacity is radiologically minor when compared to the clinical discomfort that may be manifested by the patient. In our patient, the linear striation and fibrotic appearance proceeded over a period of three and one half months, becoming more prominent in the right lung. The assymmetrical progression of the disease, while not typical, has been reported and is now a recognized pattern of this disease. The interstitial fibrosis progresses and, finally,

(Continued on page 822)

MOSTAFA DAFTARY, M.D., *Poplar Bluff*

Avulsion or Rupture of Distal Tendon of Biceps Brachii Muscle

Case Report

Although avulsion of the biceps brachii tendon from the bicipital tuberosity of the radius is a rare injury, it is not as rare as the literature would indicate. The author describes a case and the best surgical treatment. Dr. Daftary is from the Department of Surgery, Veterans Administration Hospital.

THE PATIENT was a 64-year-old white man who was admitted to the hospital in August, 1972 because of pain and weakness in his left arm, after it had been injured. The injury occurred while he was holding a calf, which jumped and injured his arm. There was a sharply convex bulge near the upper part of the left arm with local tenderness and weakness of flexion of the elbow and supination of the forearm as compared to the right side.

With the patient under axillary block anesthesia, the distal tendon of the left biceps brachii muscle was attached to the brachialis muscle with Dacron. The result has been satisfactory. About six months after the operation, the patient had regained almost complete function of his left arm.

DISCUSSION

Rupture of the long head of the biceps brachii muscle (the commonest kind of tendon rupture of this muscle) is of infrequent occurrence, and rupture of its insertion into the radius is a rare clinical finding. McReynolds[1] collected 285 cases; 144 are from questionnaires, 128 are from literature and 13 are his own. He concluded that avulsion of the biceps brachii tendon from the bicipital tuberosity of the radius is a rare injury, but not as rare as the number of cases reported in the literature would indicate. It has been seen in patients from the second to seventh decades of life, occurring mostly in their fourth and fifth decades. Only one occurrence was reported in a female patient, and bilateral involvement was noted in only five patients.[1]

The rupture can occur from a sudden forceful contracture of the biceps against resistance, usually with the elbow flexed and the forearm in supination. It has occurred in pulling, jerking, heavy lifting, swimming, playing basketball and falling. In most cases, there is no recognizable degenerative change at the point of insertion of the tendon. However, Davis and Yassine[2] have noted lipping along the anterior margin of the radial tuberosity impinging upon the tendon as the forearm was supinated or pronated both radiographically and at surgery in two patients.

The credit goes to Starks[1] for the first description of rupture or avulsion of the insertion of the distal tendon of the biceps brachii reported in 1843 and to Acquaviva for its operative treatment in 1898.

Opinions differ in regard to the proper treatment, method and site for reattaching the tendon. R. G. Smith[3] described two patients he had treated conservatively. Both had regained full power of the flexion. However, there had been some weakness in one patient and slight loss of full supination in another.

Surgical treatment consists of (A) attachment of the tendon by some method to the radius or (B) attachment to some structures other than the radius. In addition to flexing of the elbow, the biceps is a strong supinator of the forearm. Most authors agree that the tendon should be reattached at its normal position on the radial tuberosity to restore the full supination power. Although McReynolds[1] has replaced the avulsed tendon on the bicipital tuberosity of the radius in ten patients through an anterior approach without complication, Dobbie, Meheriss and Kelgore[2] have stressed the dangers and difficulties in this kind of approach and have reported on five patients who sustained permanent radial nerve damage from this procedure. Reinserting the tendon into the tuberosity of radius through a combined anterior and posterior approach and transferring the tendon to the coronoid process also have been used. Dobbie, Meheriss and Kelgore[2] have advocated suturing the distal biceps tendon to the brachialis muscle without danger to radial nerve and have had a satisfactory result in restoring the functions.

SUMMARY

Avulsion of the distal tendon of the biceps brachii is a rare occurrence. The methods of treatment consist of attachment to its normal insertion into the tuberosity of radius or to the brachialis tendon. Although the reinsertion into the radius is more physiological, it is technically difficult and damage to the radial nerve is not infrequent. Its attachment to the brachialis is a simple procedure and the result is satisfactory.

A case report of rupture of distal tendon of biceps brachii muscle and its treatment with satisfactory results has been presented.

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Reprints: Mostafa Daftary, M.D.
Dept. of Surgery
Veterans Administration Hospital
Poplar Bluff, Mo. 63901

Radiologic Problem Case

(Continued from page 820)

the lung takes on a cystic or honeycomb appearance due to obliteration of the alveoli. The ultimate diaphragmatic motion is limited, due to the loss of pulmonary elasticity. Since the roentgen findings are nonspecific, the lung biopsy is essential for a definitive diagnosis.

The case report of this patient, who is now deceased, is presented because the entire pattern of clinical and roentgen manifestations are recorded. Corticosteroids have been recommended for treatment but without long term success.

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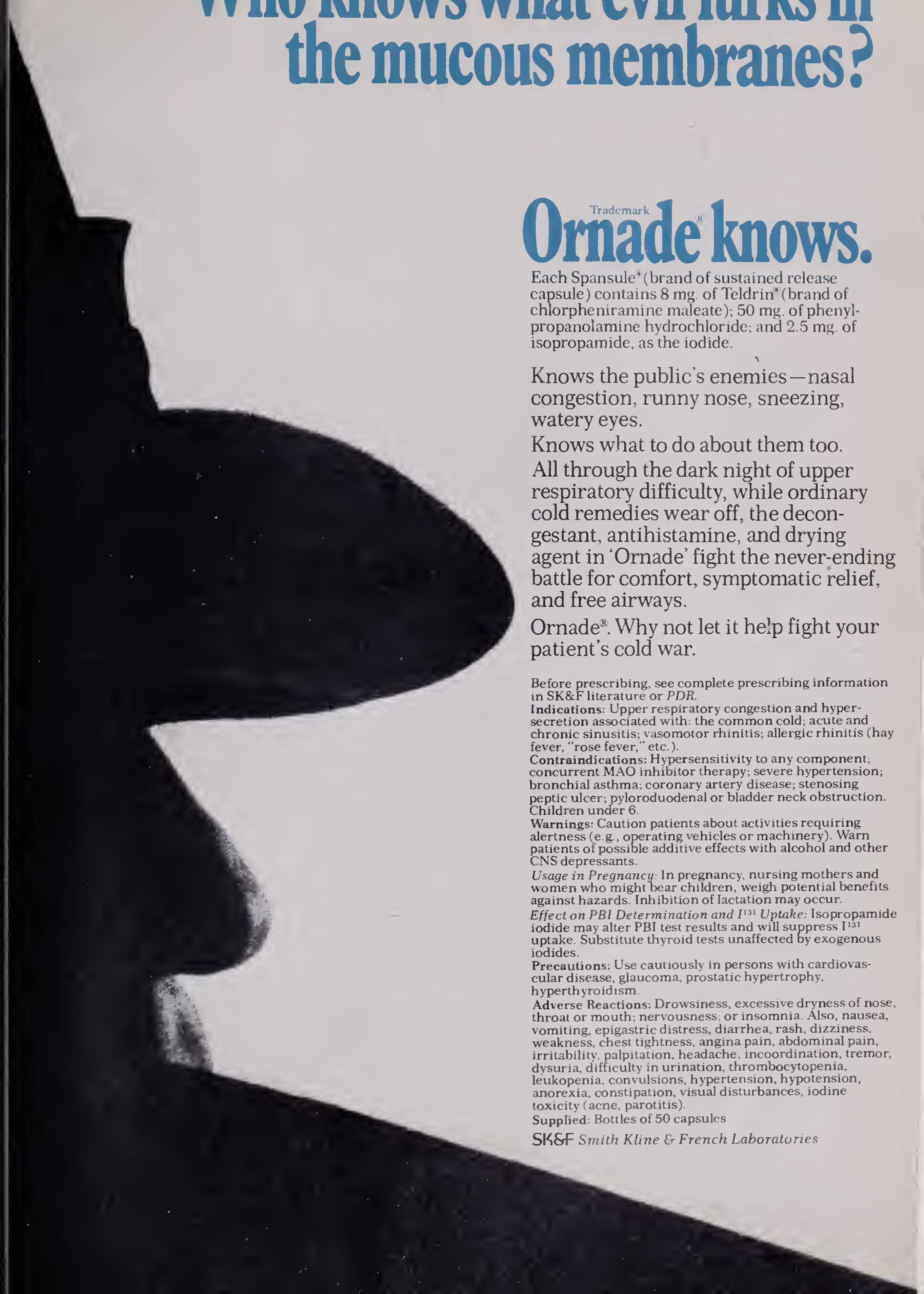

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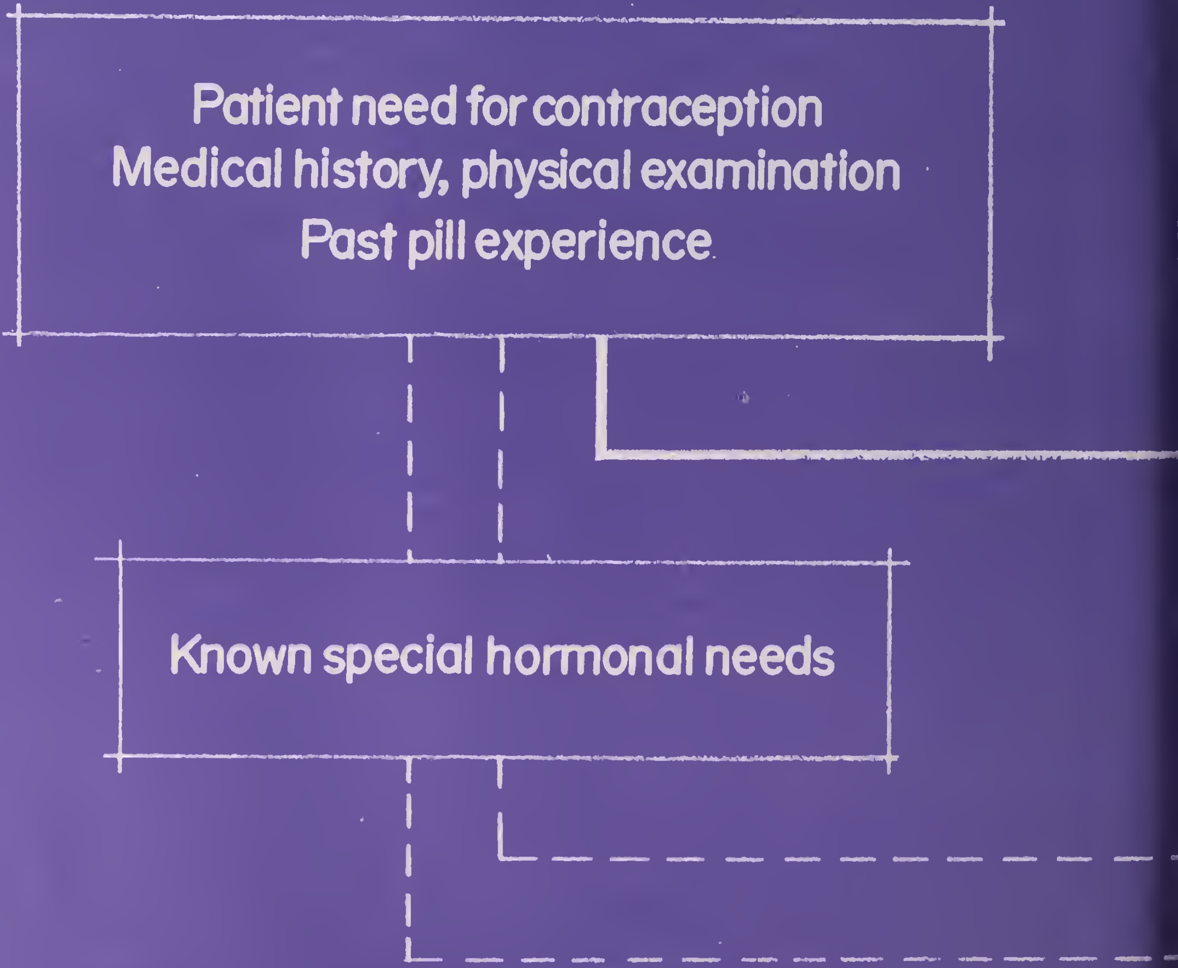

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Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in the United States. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

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Enovid-E® **Now available in the 21-pill schedule in refillable Compack® and three-cycle Triopak™**
Each tablet contains: norethynodrel 2.5 mg./mestranol 0.1 mg.

Actions—Enovid-E acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Enovid-E depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Indication—Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

Enovid-E®
brand of norethynodrel with mestranol

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Where "The Pill" Began

President's Message

There has been an ongoing battle for many years over brand-name drugs versus generic drugs. In the early 1900s, there was outright counterfeiting of prescription products. The legitimate pharmaceutical manufacturers, druggists, doctors and other interested groups helped to secure passage of antisubstitution drug laws which stopped this unethical and illegal practice.

These laws also mandated that the retail pharmacist supply the patient with the exact prescription, by brand name, that had been written by the physician.

E. A. Stricker, M.D.

Today, the antisubstitution laws are being challenged. Legislators throughout the country are alarmed at the high cost of medical care and are considering repealing these laws so that generic drugs may be substituted for band-name drugs because generics are cheaper. Many sincere and well-meaning organizations are supporting the movement for repeal of these laws purely out of financial consideration. They believe that because two drugs have the same chemical formula they will have the same therapeutic effect. Sometimes, this is true: many times, it is not. Graphite and diamonds are chemically equivalent, but certainly do not have identical properties.

There are several reasons why chemically equivalent drugs do not necessarily get an equal biologic response from the patient. One is the way the drug is put together, such as the size of crystals, compression, filler materials, type of coating, flavors, pH factors, dyes, etc. Also, not all drug manufacturers use the same degree of skill, care, testing or quality control. Third, equivalent products, although well produced, do vary in rate of absorption, blood levels and clinical response.

As we, in our practice, use these drugs, which are standardized by brand name, we become aware of consistent biologic reactions to certain given drugs. The difference in price between generics and brand-name drugs is usually not worth the difference in therapeutic predictability. And it is almost certain to be true that if generics are allowed to take the place of brand-name drugs, their price will rise as demand increases.

Repeal of the antisubstitution laws would not only victimize our patients, but would have other undesirable results, such as discouraging research by companies that market their products by brand name. These pharmaceutical firms must invest a large amount of money and time in worthwhile research. Naturally, the companies which closely reproduce the formulas and manufacture generics can sell them cheaper. This could easily destroy private research and production incentive.

To say that physicians like to prescribe expensive drugs is foolish. Most doctors prescribe a drug because they believe it is the most effective drug for that particular patient at that particular time. Experience is still the best way of knowing which drug (even among brand names) has superior biologic response. Even a well-trained pharmacist does not have the clinical experience with observation of patient reaction to impose his selection of a generic over the physician's choice.

There obviously are many situations in which generics are perfectly acceptable as substitutes and the physician is perfectly willing to use them. But the choice should be his—with no penalty of extra paperwork for him or government refusal to pay for the patient.

Woman's Auxiliary

50th Anniversary

Make It a TEL-E-YOUTH Christmas

A most appropriate point for us all to consider during this season of Christmas and gift giving is TEL-E-YOUTH, another important point in our Woman's Auxiliary Tel-Star service program.

On your Christmas list this year, please include a gift-contribution to a medical education for deserving young Missourians via your donation to the Missouri State Medical Foundation (MSMF). The funds of the Foundation are used to assist a registered, full-time medical student (1) who is working toward a M.D. degree in an AMA-accredited school of medicine in the U. S., (2) whose home residence is in Missouri and (3) who is in need of financial aid to complete his or her medical education.

Mrs. Charles R. Willman
President

In 1972-1973, the county auxiliaries in Missouri donated $2,203.50 to the MSMF. The Clay County Auxiliary alone donated a total of $597.50 or $8.91 per person and, as a result, is holding the coveted MSMF traveling plaque of recognition. We hope that every Auxiliary member will help her county group to top this record. Please make your check payable to the Missouri State Medical Foundation and forward it to Mrs. James S. Gordon, MSMF Chairman, 600 Boonville Rd., Jefferson City 65101.

We also encourage you to support the American Medical Association Education and Research Foundation (AMA-ERF) by sending a donation or purchasing special gift merchandise being sold by the chairman of each county auxiliary. Beautiful gift items include watches, jewelry, stationery, place mats, cookbooks, scarves and Christmas cards with all profits going to the AMA-ERF.

Auxiliary contributions made nationally to the AMA-ERF totalled $963,823.86 last year. The unrestricted funds given to our four medical schools in Missouri totalled almost $33,000. From 1962 to 1972, Missouri students were loaned a total of $2,025,350.

The Jackson County Medical Auxiliary received the state award for the largest total contribution to the AMA-ERF. County auxiliaries which contributed $10 per member were Pettis, Cole, Buchanan, Grand River, Dunklin and South Central. This is generous, but we need more donations if we want to contribute to maintaining the high calibre of medicine being practiced in these United States.

Remember that in making your tax deductible contribution to the AMA-ERF, you may specify that it is for a particular medical school. If you do not, it will be divided among the four medical schools in Missouri. If you prefer, you can request that it be added to the Loan Guarantee Fund, which guarantees bank loans to medical students.

A *"Million for Millions,"* the national slogan, can be accomplished if you send your check today to your county chairman or to Mrs. Larry Ozenberger, State AMA-ERF Chairman, 302 Birch Ave., Plattsburg 64477.

Why not celebrate Christmas in this way this year for a more satisfying and worthwhile season. Join the many physicians who make annual contributions to the MSMF in honor of friends outside medicine or in memory of loved ones and, at the same time, help to provide for new physicians in our state. Both funds need the support of all MSMA and Auxiliary members.

MERRY CHRISTMAS to you and yours! May you all think of Medicine in 1974.

EDITORIAL

FAIRNESS AND THE FAIRNESS DOCTRINE

It is no secret that some network TV and radio executives disapprove of the Fairness Doctrine, the requirement that contrasting viewpoints be aired on controversial issues of public importance. It isn't that these officials disapprove of editorial balance, but they contend that true balance does not necessarily consist of approximately equal time, and that its judgment is not the province of government but of responsible journalists.

It's easy to sympathize with their concern, and the Fairness Doctrine obviously has shortcomings. But the networks do not seem to be doing much to help their own cause. Two TV documentaries currently under discussion have not only raised questions of their basic fairness, but have raised anew the question of how, in the absence of pay TV or greater availability of television channels, fairness generally can be assured in a medium licensed in the public interest.

Recently, for example, NBC agreed to allow the president of the American Medical Association to present the AMA viewpoint on two network shows. But it agreed to do so only after the AMA asked the FCC to investigate a number of alleged distortions and inaccuracies in last December's documentary, "What Price Health." Moreover, several months ago the FCC staff ruled that an NBC news special broadcast in September 1972, examining the nation's private pension system, violated the Fairness Doctrine.

No one concerned about the broader aspects of press freedom can take comfort that a government agency is empowered to apply a yardstick to pro or con pronouncements, even in a licensed industry. But neither should anyone concerned with press freedom take comfort from the FCC staff finding that only two brief statements near the end of the hour-long documentary on pensions could be taken to present a viewpoint at odds with the general impression that the private pension system is replete with failure. Or take comfort that the health care documentary showed a five-year-old Ohio girl being denied necessary corrective surgery for a congenital heart condition because her unemployed father could not afford it, when in fact she received heart surgery more than a month before the broadcast.

We're sure that deeper government interference with broadcast programming would quickly cause even worse abuses; clearly the Fairness Doctrine's corollary, the "equal time" provision has already done much to limit television coverage of politics. Still, with increasing frequency we find ourselves arguing against thoughtful people who believe that journalistic professionalism is not enough, that there should be some sort of outside check. Our end of that argument would be far easier to uphold if the fairness and professionalism of all the items under question were more self-evident.

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IMPROVED ACCIDENT & HEALTH PROGRAMS

The Disability Income Policy sponsored by the Missouri State Medical Association since 1943 has now been made GUARANTEED RENEWABLE and income benefits are available up to $300.00 weekly to members under age 56 subject to acceptance by the Company.

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Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole. **Warnings:** If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established. **Precautions:** Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.

Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopeni malodor of the urine, crystalluria, hematuria; appearance of liv Ascaris in the mouth and nose. Hypersensitivity reactions

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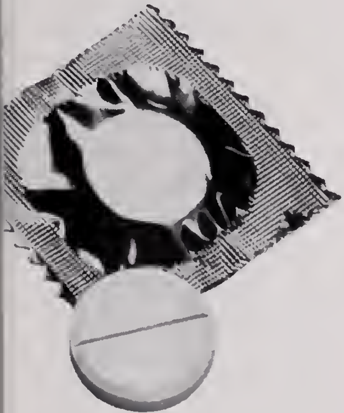

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addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.

The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).

MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.

The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

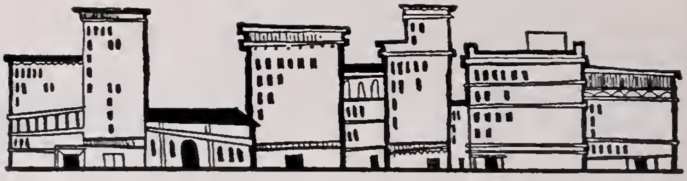
WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

From the Medical Schools



ST. LOUIS UNIVERSITY

Dr. George E. Thoma Jr. has been named vice-president for the Medical Center at St. Louis University. *Daniel L. Schlafly,* chairman of the board of trustees, announced the appointment at the quarterly meeting of the trustees.

Dr. Thoma

Dr. Thoma, former assistant vice-president for the Medical Center, was nominated by a seven-member trustee search committee which was named in October, 1972. The appointment became effective on October 22.

He succeeds the *Rev. E. J. Drummond,* S.J., who has been vice-president for the Medical Center since 1962. On October 1, Father Drummond became executive vice-president of the University.

As assistant to Fr. Drummond since 1962, Dr. Thoma has been responsible for activities related to planning, federal grants and hospital affiliations.

Dr. Thoma, associate professor of internal medicine at the School of Medicine, is a pioneer in the field of nuclear medicine. He has been editor of the *Journal of Nuclear Medicine* and a trustee of the Society of Nuclear Medicine for 11 years. He established the Radioisotope Laboratory at Firmin Desloge Hospital in 1949, which became known as one of the most completely equipped clinical radioisotope laboratories in the Middle West. Later, he developed and headed the Section of Nuclear Medicine at the St. Louis University Hospitals from 1959-1968.

He has served as a member of numerous boards and committees including the Bi-State Regional Medical Program, St. Louis Research Council and the Joint Board of Health and Hospitals, City of St. Louis. He was Health Commissioner of the City of Clayton (Mo.) and a trustee of Blue Cross Inc.

Dr. Thoma earned the M.D. degree from St. Louis University in 1947 and the B.S. degree in biochemistry from the University of Dayton in 1943. He took his internship and residency at the St. Louis University Hospitals.

Dr. Richard K. Danis, the new president of the St. Louis University Medical Alumni Association, assumed office during Founders Week. He is assistant clinical professor of surgery in the School of Medicine. Dr. Danis presented the Alumni Association's plaque of appreciation to *Dr. Francis X. Lieb,* outgoing president.

Dr. Edward L. Eyerman, Jr., assistant clinical professor of neurology at the School of Medicine, was elected president of the St. Louis University Hospitals medical and dental staff. He succeeds *Dr. Edward M. Wittgen, Jr.,* assistant clinical professor of orthopedic surgery. *Dr. Dermott Smith,* associate professor of psychiatry and former secretary-treasurer of the group, was elected vice-president. *Dr. Murray Chinsky,* assistant clinical professor of internal medicine, was elected as the new secretary and treasurer.

Dr. Elliott O'Reilly, professor of orthopedic surgery and chairman of the Department, was invited to attend an international Work-Study Group of the Spastic Society of London held at Guys Hospital in London and Nottingham. Dr. O'Reilly discussed Cerebral Palsy of Adult Patients in an exchange of ideas with physicians from many parts of the world, including Denmark, France and Spain.

Dr. Francis X. Paletta, clinical professor of surgery and director of the Section of Plastic Surgery, St. Louis University School of Medicine, has been elected a member of the board of directors of the American Society of Plastic and Reconstructive Surgery. The election took place at a meeting held in Miami in October.

WASHINGTON UNIVERSITY

The Research Corporation, through funds provided by the Brown-Hazen Program, has awarded a grant of $36,500 to Washington University Medical School for graduate research and training in medical myocology.

The principal investigators are *George S. Kobayashi,* Ph.D., and *Gerald Medoff,* M.D., associate professors, Division of Dermatology and

Division of Infectious Diseases of the Department of Internal Medicine and the Department of Microbiology. The program will provide training in laboratory and clinical investigation in the area of mycology and will prepare the trainees for academic careers.

Monies from the grant are currently supporting three postdoctoral fellows and providing equipment and supplies for research.

Robert Lee has been promoted from coordinator to assistant dean for minority student affairs at the School of Medicine. The announcement was made by *M. Kenton King*, M.D., dean, and *Samuel B. Guze*, M.D., vice-chancellor for medical affairs.

A native St. Louisian, Mr. Lee was graduated from Central High School in 1962, and from Harris Teachers College in 1966 with the B.A. degree in elementary education. He received the M.Ed. degree in 1971 from the University of Missouri at St. Louis.

From 1966 to 1968 he taught in St. Louis elementary schools. He was acting chairman of the district music program while he taught vocal music from 1968 to 1970.

Mr. Lee joined the staff at Illinois State University at Normal as admissions counselor and, after nine months, was promoted to assistant director of admissions. He became a member of the Washington University Medical School staff in 1972. He also is affiliated with the School of Dentistry, and the programs of occupational therapy, physical therapy, health care administration and graduate study at the Medical Center.

In Memoriam

Benjamin H. Cohen, M.D., 138 N. Meramec Ave., St. Louis, a graduate of the University of Toronto, 1939; member of St. Louis Medical Society; age 59, died Sept. 11, 1973.

Shelby C. Slaughter, M.D., Fredericktown, a graduate of Missouri Medical College, 1899; member of Mineral Area County Medical Society; age 95; died Sept. 21, 1973.

James O. Helm, M.D., New Florence, a graduate of Rush Medical College, 1927; member of Montgomery County Medical Society; age 77; died Sept. 22, 1973.

Waldo B. Isom, M.D., Knox City, a graduate of St. Louis College of Physicians and Surgeons, 1925; member of North Central County Medical Society; age 73, died Sept. 22, 1973.

O. P. J. Falk, M.D., 3 Southmoor Dr., Clayton, a graduate of St. Louis University, 1918; member of St. Louis County Medical Society; age 79; died Sept. 23, 1973.

Ernest E. Tremain, M.D., 2901 Big Bend Blvd., Maplewood, a graduate of St. Louis University, 1921; member of St. Louis County Medical Society; age 78; died Sept. 28, 1973.

Samuel R. McCracken, M.D., Box 220, Excelsior Springs, a graduate of Loyola Medical College, 1919; member of Clay County Medical Society; age 80; died Oct. 5, 1973.

Sidney Goldenberg, M.D., 8515 Delmar, University City, a graduate of State University of Iowa, 1951; member of St. Louis Medical Society; age 50; died Oct. 7, 1973.

Paul B. Nussbaum, M.D., 1858 Broadway, Cape Girardeau, a graduate of St. Louis University, 1924; member of Cape Girardeau County Medical Society; age 73; died Oct. 8, 1973.

Norman H. Barnett, M.D., 25th and Jackson, Joplin, a graduate of the University of Missouri, 1945; member of Jasper County Medical Society; age 50; died Oct. 9, 1973.

William R. Eubank, M.D., 6700 Troost Ave., Kansas City, a graduate of Louisiana State University, 1939; member of Jackson County Medical Society; age 59; died Oct. 25, 1973.

Max Rosen, M.D., 801 E. Cherry, Springfield, a graduate of Cornell University, 1932; member of Greene County Medical Society; age 65; died Oct. 27, 1973.

Leon A. Feinstein, M.D., 6411 Wydown Blvd., St. Louis, a graduate of St. Louis University, 1909; member of St. Louis Medical Society; age 86; died Oct. 29, 1973.

Carl J. Heifetz, M.D., 4511 Forest Park Blvd., St. Louis, a graduate of Washington University, 1929; member of St. Louis Medical Society; age 66; died Oct. 31, 1973.

Clarence R. McCubbin, M.D., 8612 Meadow Lane, Leawood, Kan., a graduate of the University Medical College, Kansas City, 1912; member of Jackson County Medical Society; age 85; died Oct. 31, 1973.

New Members

Henry Adeyemi-Doro, M.D., 2601 N. Whittier, St. Louis, has become a member of St. Louis Medical Society. Dr. Adeyemi-Doro is a native of Nigeria, received his preliminary education at Government College and his M.D. degree at the University of Ibadan in 1969. He specializes in general surgery.

A. L. Ahuja, M.D., 5400 Arsenal, St. Louis, has become a member of St. Louis Medical Society. Dr. Ahuja is a native of Shikarpursind, West Pakistan, received his preliminary education at Jairind and his M.D. degree at Christian Medical College in 1966. He specializes in psychiatry.

Marvin P. Altman, M.D., 2850 W. Clay, St. Charles, has become a member of St. Charles-Lincoln County Medical Society. Dr. Altman is a native of Washington, D. C., received his preliminary education at the University of Pittsburgh and his M.D. degree at the University of Philadelphia in 1966. He specializes in internal medicine.

Victor A. Arana, M.D., Callaway Bank Bldg., Fulton, has become a member of Callaway County Medical Society. Dr. Arana is a native of Trujillo, Peru, received his preliminary education at the University of Trujillo and his M.D. degree at San Marcos University in 1961. He specializes in general surgery.

Fernando Arias, M.D., Barnes Hospital Plaza, St. Louis, has become a member of St. Louis Medical Society. Dr. Arias is a native of Calarca, Colombia, South America, received his preliminary education at Universidad de Caldas and his M.D. degree at National University in 1958. He specializes in obstetrics and gynecology.

Admad K. Bayrakdar, M.D., 6420 Clayton Rd., St. Louis, has become a member of St. Louis Medical Society. Dr. Bayrakdar is a native of Syria, received his M.D. degree at Damascus University in 1970. He specializes in internal medicine.

Inocencio M. Boc, M.D., 1515 Lafayette, St. Louis, has become a member of St. Louis Medical Society. Dr. Boc is a native of the Philippines, received his preliminary education at the University of the Visayas and his M.D. degree at Cebu College of Medicine in 1967. He specializes in pediatrics.

Garry L. Carls, M.D., 1325 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Carls is a native of Beardstown, Ill., received his preliminary education at Purdue University and his M.D. degree at St. Louis University in 1965. He specializes in radiology.

R. Marshall Colburn, M.D., 510 S. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Colburn is a native of St. Louis, received his preliminary education at Lawrence College and his M.D. degree at Northwestern University in 1966. He specializes in radiology.

Narenda K. Datta, M.D., 30 North Allen, Bonne Terre, has become a member of Mineral Area County Medical Society. Dr. Datta is a native of New Delhi, India, received his preliminary education at Delhi University and his M.D. degree at Punjab University in 1962. He specializes in obstetrics and gynecology.

Ramon R. DyRagos, M.D., 2929 Baltimore, Kansas City, has become a member of Clay County Medical Society. Dr. DyRagos is a native of the Philippines, received his preliminary education at the University of St. Tomas and his M.D. degree at the University of St. Tomas in 1965. He specializes in neurological surgery.

George Emeran, M.D., 600 N. Union, St. Louis, has become a member of St. Louis Medical Society. Dr. Emeran is a native of Haiti, received his preliminary education at Institution St. Louis De Gonzague and his M.D. degree at the Medical School of Haiti in 1966. He specializes in urology.

Tomas Espinosa, M.D., Fulton State Hospital, Fulton, has become a member of Callaway County Medical Society. Dr. Espinosa is a native of Monterey, Mexico, received his preliminary education at the University of Nuevo and his M.D. degree at the University of Nuevo Leon in 1965. He specializes in psychiatry.

Allan R. Fleming, M.D., 2929 Baltimore, Kansas City, has become a member of Jackson County Medical Society. Dr. Fleming is a native of Kansas City, received his preliminary education at the University of Missouri and his M.D. degree at the University of Kansas in 1969. He specializes in hematology.

Robert L. Grubb, M.D., Barnes Hospital Plaza, St. Louis, has become a member of St. Louis Medical Society. Dr. Grubb is a native of North Carolina, received his preliminary education at the University of North Carolina and his M.D. degree at the University of North Carolina. He specializes in neurological surgery.

D. Wade Hammond, M.D., 1301 Boonslick Rd., St. Charles, has become a member of St. Charles-Lincoln County Medical Society. Dr. Hammond is a native of Bluffton, Ind., received his preliminary education at DePauw University and his M.D. degree at Washington University in 1965. He specializes in orthopaedic surgery.

Fayez Hanna, M.D., 5400 Arsenal, St. Louis, has become a member of St. Charles-Lincoln County Medical Society. Dr. Hanna is a native of Sudan and received his M.D. degree at Ein Shams University in 1957. He specializes in psychiatry.

L. Henares-Levy, M.D., 1221 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Henares-Levy is a native of Mexico, received her preliminary education at Universidad Labastida and her M.D. degree at Universidad de Neuvo Leon in 1971. She is a resident in psychiatry.

George J. Hill, M.D., 4960 Audubon, St. Louis, has become a member of St. Louis Medical Society. Dr. Hill is a native of Cedar Rapids, Ia., received his preliminary education at Yale University and his M.D. degree at Harvard University in 1957. He specializes in surgery.

Jacob Igra, M.D., 1221 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Igra is a native of Lvou, Poland, received his preliminary education at the University of Melbourne and his M.D. degree at the University of Melbourne in 1956. He specializes in neurology.

Walter D. Kistler, Jr., M.D., 2639 Miami, St. Louis, has become a member of St. Louis Medical Society. Dr. Kistler is a native of Davenport, Ia., received his M.D. degree at Washington University in 1966. He specializes in cardiology.

Russell R. Kraeger, M.D., 1200 Lanvale Dr., St. Louis, has become a member of St. Louis Medical Society. Dr. Kraeger is a native of St. Louis, received his preliminary education at St. Benedicts College and his M.D. degree at St. Louis University in 1967. He specializes in general surgery.

George B. Kroeger, Jr., M.D., 621 S. New Ballas Rd., St. Louis, has become a member of St. Louis Medical Society. Dr. Kroeger is a native of St. Louis, received his preliminary education at St. Louis University and his M.D. degree at St. Louis University in 1966. He specializes in otolaryngology.

S. Kulkamthorn, M.D., 216 S. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Kulkamthorn is a native of Thailand, received her preliminary education at Chulalonokorn University and her M.D. degree at Chulalonokorn University in 1968. She is a resident in physical medicine and rehabilitation.

Harold G. Kunz, Jr., M.D., 100 N. Euclid, St. Louis, has become a member of St. Louis Medical Society. Dr. Kunz is a native of New Jersey, received his preliminary education at Cornell University and his M.D. degree at Cornell University in 1965. He specializes in radiology.

Joseph P. McEnery, M.D., 187 Concord Village Plaza, St. Louis, has become a member of St. Louis Medical Society. Dr. McEnery is a native of Richmond Hill, N. Y., received his preliminary education at St. Peter's College and his M.D. degree at St. Louis University in 1967. He specializes in ophthalmology.

Jerry Meyers, M.D., 4511 Forest Park, St. Louis, has become a member of St. Louis Medical Society. Dr. Meyers is a native of Brady, Tex., received his preliminary education at the University of Texas and his M.D. degree at Washington University in 1966. He is specializing in general surgery.

Thomas M. Moran, M.D., 1221 S, Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Moran is a native of Des

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Moines, Ia., received his preliminary education at Loras College and his M.D. degree at St. Louis University in 1965. He specializes in psychiatry.

Gerald W. Moritz, M.D., 1325 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Moritz is a native of Brooklyn, N. Y., received his preliminary education at the University of California and his M.D. degree at St. Louis University in 1970. He is a resident in otorhinolaryngology.

Jaime Mosquera, M.D., 1245 Graham Rd., Florissant, has become a member of St. Louis Medical Society. Dr. Mosquera is a native of Panama, received his preliminary education at the University of Panama and his M.D. degree at the University of Panama in 1964. He specializes in obstetrics and gynecology.

David William Myers, Jr., M.D., Commercial Ave. and Marisa St., Smithville, has become a member of Clay County Medical Society. Dr. Myers is a native of Norborne, Mo., received his preliminary education at the University of Missouri-Columbia, and his M.D. degree at the University of Missouri-Columbia in 1969. He specializes in obstetrics and gynecology.

Richard O. Olson, Jr., M.D., 2850 W. Clay, St. Charles, has become a member of St. Charles-Lincoln County Medical Society. Dr. Olson is a native of Chicago, Ill., received his preliminary education at Elgin Academy and his M.D. degree at the University of Illinois in 1965. He specializes in general surgery.

William D. Owens, M.D., Barnes Hospital Plaza, St. Louis, has become a member of St. Louis Medical Society. Dr. Owens is a native of St. Louis, received his preliminary education at Westminster College and his M.D. degree at the University of Michigan in 1965. He specializes in anesthesiology.

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Adiraju Palagiri, M.D., 1515 Lafayette, St. Louis, has become a member of St. Louis Medical Society. Dr. Palagiri is a native of India, received his M.D. degree at Kurnoll College in 1965. He specializes in urology.

Leopoldo P. Pardo, Jr., M.D., 6744 Clayton Rd., St. Louis, has become a member of St. Louis Medical Society. Dr. Pardo is a native of the Philippines, received his preliminary education at Letran College and his M.D. degree at the University of the Philippines in 1955. He specializes in neurosurgery.

Abraham M. Phillips, M.D., 777 S. New Ballas Rd., St. Louis, has become a member of St. Louis Medical Society. Dr. Phillips is a native of Cape Girardeau, received his preliminary education at Washington University and his M.D. degree at the University of Missouri-Columbia, in 1969. He specializes in pediatrics.

Prabha Partap, M.D., 9620 Hartdale, St. Louis, has become a member of St. Louis Medical Society. Dr. Partap is a native of India, received her preliminary education at Delhi University and her M.D. degree at S. N. Medical College in 1967. She specializes in pathology.

John F. Pinto, M.D., 4617 Gustine Terr., St. Louis, has become a member of St. Louis Medical Society. Dr. Pinto is a native of Ohio, received his preliminary education at the University of Akron and his M.D. degree at St. Louis University in 1972. He specializes in internal medicine.

Joseph Prusaczyk, M.D., 1225 Graham Rd., Florissant, has become a member of St. Louis Medical Society. Dr. Prusaczyk is a native of St. Louis, received his preliminary education at St. Louis University and his M.D. degree at St. Louis University in 1968. He specializes in pediatrics.

Morris W. Pulliam, M.D., Barnes Hospital Plaza, St. Louis, has become a member of St. Louis Medical Society. Dr. Pulliam is a native of Boonville, received his preliminary education at the University of Missouri-Columbia and his M.D. degree at Washington University in 1966. He is a resident in neurosurgery.

Mohammad Hafeezur Rahman, M.D., 2850 W. Clay, St. Charles, has become a member of St. Charles-Lincoln County Medical Society. Dr. Rahman is a native of Delhi, India, received his preliminary education at S. M. Science College and his M.D. degree at Dow Medical College in 1960. He specializes in pediatrics.

Robert A. Ratcheson, M.D., Barnes Hospital Plaza, St. Louis, has become a member of St. Louis Medical Society. Dr. Ratcheson is a native of Chicago, Ill., received his preliminary education at Miami University and his M.D. degree at Northwestern University in 1965. He specializes in neurological surgery.

A. Razzaq, M.D., 3165 Myrtle, Granite City, Ill., has become a member of St. Louis Medical Society. Dr. Razzaq is a native of Pakistan, received his M.D. degree at King Edward College in 1952. He specializes in internal medicine.

Michael Roark, M.D., 1325 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Roark is a native of Alabama, received his preliminary education at the University of Notre Dame and his M.D. degree at St. Louis University in 1969. He is a resident in ophthalmology.

Charles C. Schober, M.D., 4524 Forest Park, St. Louis, has become a member of St. Louis Medical Society. Dr. Schober is a native of Louisiana, received his preliminary education at Louisiana State University and his M.D. degree at Louisiana State University in 1949. He specializes in psychiatry.

Gustav Schonfeld, M.D., 507 S. Euclid, St. Louis, has become a member of St. Louis Medical Society. Dr. Schonfeld is a native of Czechoslovakia, received his preliminary education at Washington University and his M.D. degree at Washington University in 1960. He specializes in internal medicine.

Seyvee Sirintrapun, M.D., 4720 S. Spring, St. Louis, has become a member of St. Louis Medical Society. Dr. Sirintrapun is a native of Thailand, received his preliminary education at the Pre-University School of Thailand and his M.D. degree at Chiengmai University in 1968. He specializes in obstetrics and gynecology.

James B. Smith, M.D., 100 N. Euclid, St. Louis, has become a member of St. Louis Medical Society. Dr. Smith is a native of Boonville and received his M.D. degree at the University of Missouri in 1967. He specializes in psychiatry.

Teodoro C. Tang, M.D., 2415 N. Kingshighway, St. Louis, has become a member of St. Louis Medical Society. Dr. Tang is a native of the Philippines, received his preliminary education at the University of the Philippines and his M.D. degree at Far Eastern University in 1962. He specializes in general surgery.

Anver A. Tayob, M.D., 1465 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Tayob is a native of Parbandar, India and received his M.D. degree at Dow Medical College in 1965. He specializes in orthopedics.

Surinder S. Thind, M.D., 6420 Clayton Rd., St. Louis, has become a member of St. Louis Medical Society. Dr. Thind is a native of India, received his preliminary education at Government College of India and his M.D. degree at C.M.C. Hospital in 1968. He is a resident in internal medicine.

Johnson Underwood, III, M.D., 5140 N.E. Antioch Rd., Kansas City, has become a member of Clay County Medical Society. Dr. Underwood is a native of Kansas City, received his preliminary education at William Jewell College and his M.D. degree at the University of Missouri-Columbia, in 1966. He specializes in general surgery.

Emerito F. Ureta, M.D., 1755 S. Grand, St. Louis, has become a member of St. Louis Medical Society. Dr. Ureta is a native of the Philippines, received his preliminary education at Far Eastern University and his M.D. degree at Far Eastern University in 1966. He specializes in general surgery.

Fremont P. Wirth, M.D., Barnes Hospital Plaza, St. Louis, has become a member of St. Louis Medical Society. Dr. Wirth is a native of Nashville, Tenn., received his preliminary education at Williams College and his M.D. degree at Vanderbilt University in 1966. He specializes in neurosurgery.

Council Reports

(Continued from page 805)

which indicates that Springfield is overbuilt. However, Blue Cross is now paying this hospital. Dr. Peterson indicated that this was an example that if the community is right, nobody from some place else should be making your decisions.

District #7—Dr. Chandler reported that the Jackson County Medical Society Medical-Legal Committee has worked diligently and has come up with a final draft of its proposed interprofessional code. Dr. Chandler indicated that he thought it was excellent and will pass it along to the Chairman of the MSMA Commission for any help it might be to them.

Jackson County Medical Society has instituted a membership campaign aimed at the 335-plus-or-minus physicians in the county who presently are not members.

The Medical Business Bureau in Jackson County is contemplating the establishment of a placement service for employees in physicians' offices. They presented their proposal to the Jackson County Council and were given an okay to go ahead with the study for the establishment of such a service.

PRESIDENT'S REMARKS

Dr. Stricker reported that he had attended many meetings during the past summer. At the AMA Convention in New York, he attended the State Presidents' meeting. This was attended by many state presidents and foreign dignitaries. The meeting was well worthwhile.

He said that he had attended the Blue Shield workshop meeting held at the Lake of the Ozarks this past summer.

Dr. Stricker also attended the Mid-Mo Medical Society meeting at which Dr. Stanley Peterson gave an interesting presentation on the Missouri Physicians' Guild.

Dr. Stricker stated that he had attended the Kentucky Medical Association convention recently and truly enjoyed the Southern hospitality. Presidents of six other states were in attendance at the meeting. He indicated that he attended the Councilor District meeting in Springfield at which Mr. Weihaupt spoke.

MSMA SPONSORSHIP OF FUTURE TOURS

Mr. Cooper reported that the Rhine Escape tour would leave on Sunday, October 7. This tour was oversold with about 75 on the wait list. Several other trips are being planned—one European trip by Intrav in June, 1974 and a Grecian tour by Marriott in August, 1974. Mr. Cooper asked if the Council might be interested in a post-convention trip, such as to Las Vegas for four days for about 100 persons, $200-$225 including stay at Caesar's Palace. Discussion followed as to whether such a trip might enhance the attendance at the Annual Session or hinder such attendance. On motion, duly seconded, it was agreed that MSMA not sponsor such a post-convention trip.

REPORT OF BUDGET AND FINANCE COMMITTEE

Dr. Judd, Chairman of the Finance and Budget Committee, gave the following report:

The Budget and Finance Committee of the MSMA met at the MSMA Offices in Jefferson City on September 9, 1973. Present were Donald Judd, M.D.; James C. Cope, M.D.; E. A. Stricker, M.D.; Howard McAlhany, M.D.; and Mr. Ray McIntyre. Allen Chandler, M.D., was ill and unable to attend. Mr. Gerald Sandweg and Mr. Oliver Wilkins of the Mercantile Bank of St. Louis met with the Committee. The following items were considered:

1. *MSMA Building*—MSMA has borrowed $120,000 from the Mercantile Bank at 7% annual interest. This loan expires in early October, 1973. The Mercantile Bank desires to terminate the present loan and will establish a conventional real estate first mortgage loan for 15 years at 7% on the MSMA building and furnishings. The Bank is willing to loan up to 80% of a conservative appraisal of the value of the MSMA building and building site. Such an appraisal has been completed with the appraised value of $100,000. Thus, Mercantile will extend the loan up to $80,000 at 7% annual interest, to be paid within 15 years. The payments are to be made in level monthly payments. Prepayment of any portion of the loan can be made without penalty.
2. *Loan Payment*—To reduce the present loan from $120,000 to below $80,000, a motion was made and unanimously passed that MSMA sell bonds from its investment portfolio and apply the proceeds to the reduction of the present loan. The recent market value of these bonds was $48,331.00. Applied to the present loan, this would leave a mortgage loan of approximately $72,000 with annual payments of approximately $7,765 per year. The recent stock market situation would make sale of any stock unwise at the present time.
3. *Budget*—A more detailed budget will be submitted in December. Advertising revenue from the MSMA *Journal* is less than anticipated.
4. *Recommendation*—MSMA dues are low in comparison to those in other states. Our present dues are $65 per year with a $10 per year special assessment for the Missouri State Medical Foundation. The Foundation has about $487,000 loaned out at present. The assessment produces about $38,000 per year. It is recommended that this assessment for the MSMF be discontinued and that the MSMF continue to be supported by interest on loans, gifts and bequests. The assessment would be directed to the following:
   a. Reserve fund—50%
   b. Special projects—50%—Retirement of building fund, continuing education, etc, that the Council deems wise.

   This requires approval by the Council and House of Delegates.
5. *Assignments*—The Council must decide officially who can execute assignments on behalf of MSMA.

Dr. Judd stated that approval by the Council and House of Delegates would be necessary regarding Recommendation #4 of the Committee's Report, and the Budget and Finance Committee proposes such a resolution to implement this recommendation.

Dr. Matthews stated that there is need for more operating revenue and that, perhaps, rather than ask for a revolving assessment, a dues increase should be considered. Dr. Mayer pointed out that the need for student loans is increasing and that he felt the MSMF assessment should be continued.

Dr. Judd stated that the pros and cons of this matter had been discussed at the Committee meeting and it seemed obvious that a time will come when the Association will need to balance what they have done for the medical students against what needed to be done for physicians who are members. The time should come when the money coming back in repayments can be turned around and be loaned to students and still provide adequate funding for the student loans. Several other officers and councilors expressed their views on discontinuance of the assessment and proposed dues increase.

Dr. Martin moved to table the resolution. Motion was seconded and carried.

A motion was made to approve selling the bonds indicated above, which authorization was given the Finance Committee by previous action of the Council and the 1973 House of Delegates. The motion was seconded and adopted.

Dr. Judd stated that the Council needs to decide officially who could execute assignments on behalf of MSMA. A motion was made that the President of the Association be authorized to execute assignments on behalf of MSMA. Motion was seconded and adopted.

REPORT OF LEGISLATIVE COMMITTEE

Dr. Matthews reported that the Committee had met on Saturday morning and had discussed proposed legislation to be introduced in the upcoming session of the General Assembly. He indicated that this will be a short legislative session and most proposed legislation would have to be pre-filed if it was to get anywhere.

Dr. Matthews stated that the Legislative Committee, in cooperation with the ophthalmologists, had developed a delegation amendment. He stated that Council approval was needed.

A motion was made by Dr. Cope to approve this portion of the report. Motion was seconded and carried.

Dr. Domke stated that an Attorney General's opinion had been obtained on midwifery and that the opinion and the proposed legislation might be in conflict. He stated that, perhaps, this should be referred to the Board of Health to get an Attorney General's opinion. Dr. Matthews indicated that this could be done, but that the bill would have to be pre-filed if it is to get anywhere in the Legislature.

A motion was made that this proposed legislation be referred to the Board of Health and an Attorney General's opinion be obtained. The motion was seconded and adopted.

The next item discussed by the Legislative Committee was "sick doctor" legislation. Dr. Matthews stated that this legislation was introduced late in the last session of the General Assembly and received a favorable response from legislators. The intent of this legislation is to help the "sick doctor" obtain treatment. He indicated that special articles on this subject would be printed.

A motion was made to adopt this portion of the report. The motion was seconded and adopted.

A laboratory licensing law was discussed by the Legislative Committee. A similar bill had been introduced previously. Dr. Matthews indicated that the intent of the bill was to properly regulate laboratories doing commercial work.

A motion was made by Dr. Gunn for approval of this section of the report. Motion was seconded and carried.

Dr. Matthews next discussed Resolution #9 from the 1973 MSMA House of Delegates, which called for comprehensive coverage for newborns in insurance policies. It was felt by the Committee that going through the Legislature is not wise and that this matter should be directed to the Insurance Department and the Health Insurance Council.

Legislation regarding physical therapists was considered by the Legislative Committee. This legislation would allow only licensed physical therapists to represent themselves as physical therapists.

A motion was made to adopt this portion of the report. The motion was seconded and carried.

Dr. Matthews reported that there are rumors that a bill may be introduced which would specify the number of hours of continuing education for annual registration.

Dr. Matthews stated that our legislative record for the past session was good and that this was due to a lot of hard work on the part of Royal Cooper, Cork Swarens and Ray McIntyre, who deserve a lot of thanks for their efforts.

Mr. McIntyre stated that he, Royal and Cork were grateful for Dr. Matthews comments and his confidence, but he would be amiss if he did not mention that Dr. Matthews had testified at hearings and that without his help and advice, the staff would have been much less effective.

REPORT OF LEGAL COUNSEL

Mr. McIntyre stated that Mr. Noble, who was ill and unable to attend the meeting, had sent a letter regarding the progress in the lawsuit relating to the HCF now under appeal. The letter indicated that (1) Respondents' motion for extension of time to Oct. 15, 1973 to file brief has been granted by the Court; (2) Brief will be filed on or before October 15 and a copy will be sent to Ray McIntyre; (3) Since the appellants failed to perfect their appeal on Count II of their suit, which was the Count directed against the Health Care Foundation of Missouri, the judgment of the Trial Court in favor of the Health Care Foundation of Missouri is final.

REPORT OF MMPAC

Dr. Martin reported that resolutions regarding PAC had been passed at the April Council meeting, but that they had not been implemented.

Mr. McIntyre stated that there had been questions concerning what activities the personnel of MSMA could take regarding PAC. He indicated that there had been contact with Lee Mortenson and the Legal Counsel of AMPAC and the AMA regarding this question and whether *Journal* pages can be used for PAC. Mr. McIntyre stated that our CPA was also concerned as to exactly what the staff could do in regard to PAC.

Dr. Martin stated that other states have gotten into this and that it was his understanding that activities which didn't deal directly with specific candidate support can be classified as educational activities.

Mr. Mortenson outlined how some other states handle staff time spent on PAC and how this was paid for. Each state mentioned handled things in different ways. Dr. Hetlage stated that physicians need to be educated to think along political lines without mentioning candidates. Dr. Martin reported that PAC Bylaws had been rewritten and that the size of the Board is going to be increased. The Board will consist of two members from each of the Councilor Districts (at least one of whom is to be a physician), President of MSMA, President-Elect of MSMA, Chairman of the Council, a Woman's

Auxiliary Representative and the Executive Secretary of MSMA.

Dr. Martin stated that some resolutions regarding membership also had been passed. Mr. Swarens stated that letters are going out to new members, to members who are renewing only MSMA and to members who are renewing both MSMA and AMA membership. He indicated that an MSMA brochure and an AMA brochure were supposed to be sent out, but the AMA brochure has not been received and the MSMA brochure is almost ready to be printed. He stated that no direction was given as to when these brochures are to be sent out, but it seemed practical they be sent out with the next dues billing.

REPORT OF AMA DELEGATES

Dr. Washburn gave the following report of the AMA annual meeting held in June:

"This Council has already sadly acknowledged the death of Art Neilson. Your AMA Delegation would like to add its sincere feeling of loss on the passing of Art and its heartfelt condolences to his wife, Janet, and the family. Art was a truly dedicated and competent man in many fields and activities, and we shall all miss him. Staff has been directed to submit a memorial resolution to the AMA for presentation at the Clinical Session.

"I will attempt to present a brief summary of the AMA House of Delegates action in New York. It was the largest business session in the history of the AMA. Meeting for a total of almost 19 hours, the House acted on 84 reports and 179 resolutions for a total of 263 items of business.

"As most of you know, Hector Benoit was successful in his reelection bid for the Council on Medical Service. Bob Kelley, who filled in for Art, did an obviously effective job in directing Hector's campaign. Dr. Russell B. Roth of Pennsylvania, who spoke at the MSMA Convention two years ago, was installed as President of AMA and Malcom C. Todd of California, was selected as President-Elect.

"The resolution presented by the Missouri Delegation which expressed concern over disruptive socioeconomic influences in medical practice and urged a "hard line" in dealing with those influences was not adopted. However, a substitute was adopted which stated: "That Officers and the Board of Trustees of the AMA take steps to increase the capacity of the AMA to speak with authority in representing the interest of the medical profession and the public in the socioeconomic areas."

"Issues discussed ranged from PSROs and wage-price controls to institutional licensure and the need for more primary care physicians, as follows:

PSRO's—Resolutions were passed informing HEW that peer review for physicians can be carried out only by organizations composed of practicing physicians and that since many such organizations are now in existence, HEW rules and regulations should be written to allow existing peer review groups to function as PSROs. The House also recognized that repeal or modification of PSRO legislation may ultimately be required to preserve high quality of patient care.

Wage-Price Controls—The AMA is to work for an end to discriminatory treatment toward physicians under the controls.

FDA Regulations—The AMA will continue to protest current and proposed FDA regulations which restrict the use of prescription drugs to "official labeling" and make an effort for establishing better communications between the practicing physician and the FDA.

QAP—The House expressed reservations about the American Hospital Association's proposed peer review mechanism and the AMA representatives will meet with the AHA to offer suggestions.

Support for Medical Staffs—It was resolved that any arrangement between hospital board of trustees and its medical staff that conflicts with the AMA principles of ethics and that unilateral changes in medical staff bylaws by hospital trustees are improper.

Physicians on Hospital Boards—The House called for increased medical staff representation on hospital boards, asked state and local medical societies to remove barriers to such representation and requested the JCAH to ascertain the effectiveness of communications between hospital governing boards and medical staffs.

Certificate of Need—The new Social Security Law, which more-or-less places certificate of need regulations in effect regardless of state laws, was discussed and the AMA will continue to support voluntary planning that preserves decision-making on the local level and seek the participation of practicing physicians on planning boards.

Primary Care Physicians—The AMA is to publicize and promote a goal to have at least 50% of all medical graduates enter residency training in the primary care specialties in the coming years. Also, the AMA is to continuously monitor the need for number and types of physicians.

Medical Schools—The House adopted a report which presented the essential characteristics by which a medical school is accredited, thus bringing up to date a document last revised in 1957.

Unions—Unionism among self-employed physicians was opposed, but AMA will maintain its interest and concern in those physicians in employment situations who need assistance and support.

Malpractice—The formation of a Medical Liability Commission to represent health care providers in dealing with medical malpractice problems was approved. The Commission will consist of representatives of the AMA, AHA, American College of Surgeons, American College of Physicians and four specialty societies.

Internal Matters—The House added a resident-intern member to the Council on Medical Service and Council on Medical Education, but defeated a move which would have separated the scientific meetings from meetings of the House. Also, the House changed the dues setup so that the delinquency date for AMA dues is April 30, rather than June 1, each year and eliminated the requirement that members dropped for nonpayment must pay one year's past dues.

"Regarding the AMA Board of Directors, the House instructed the Council on Constitution and Bylaws to prepare for the 1973 Clinical Session a measure that will allow the House to vote on whether Trustees shall serve a maximum of two three-year terms. Now, Trustees may now serve up to three three-year terms.

"*In Other Action* the House reaffirmed the AMA abortion policy which states that 'abortion is a medical procedure and should be performed only by a duly licensed physician in accredited hospitals acting only after consultation with two other physicians, and in conformance with standards of good medical practice. . . .'

"Also, the House voted to support and collaborate with efforts to set up #911 as the nationwide emergency telephone number.

"And, the House encouraged state medical societies to support medical licensure law amendments to permit out-of-state physicians to practice temporarily in areas of medical need.

"And, finally, Bob Hope, who was presented the AMA Citation of a Layman Award for his philanthropy on behalf of medical facilities and causes across the country, was one of the highlights of the Convention as he entertained delegates with the unique comedy only he can offer."

Dr. Washburn stated that the AMA delegates had been spread rather thin because of the campaign for Dr. Benoit and the help of the staff and officers throughout the meeting was most important. He said that sometime in the past, the Council had made a policy that the senior AMA delegate should report on AMA meetings to the Council. Dr. Washburn reported that he thought this should be changed due to the fact that each delegate covers different areas during the AMA meeting and that it would be better to have each report on what he covered. He indicated that the possibility of only opening the MSMA Hospitality Suite for one night at the AMA clinical meeting was being considered.

Dr. Washburn stated that if it is feasible during the MSMA Annual Session, an informal meeting could be set up so that members of the Association could meet with the AMA Delegates and Alternates to ask questions, give criticism, etc.

A motion was made that the suggestion that the AMA Delegates and Alternates meet with members of the Association at the Annual Session be implemented. Motion was seconded and carried.

A motion was made to approve the AMA report as received. Motion was seconded and carried.

REPORT OF BUILDING COMMITTEE

Dr. Matthews stated that the MSMA's new building is now completed and he hopes that the Councilors will urge members in their districts to visit the new headquarters.

REPORT OF MEDICAL SCHOOL DEANS

Dr. King reported Washington University Medical School has 120 freshman students and that by next year, the total student body would be 480.

Dr. Noback reported that there were 72 new students in Year 1 and 40 at the Year 3 level in Kansas City. He stated that several new faculty members had been added. There were 40, Year 2, students in preceptorships in Kansas City and Western Missouri this past summer and it is hoped that this can be expanded to include areas outside of Western Missouri.

Dr. Noback mentioned that several students had taken Part 1 of the National Boards as noncandidates. He indicated that the Western Missouri Health Education Center now has the cooperation of the dental and pharmacy schools. He reported that the groundbreaking ceremony had been held for the new Truman Medical Center, which will replace the present General Hospital.

Dr. Mayer reported that Joseph White, M.D., had been appointed as the Provost for Health Affairs at the University of Missouri. He indicated that Dr. White had hoped to attend the Council meeting, but had a prior commitment. Dr. Mayer stated that Dr. White would like an opportunity to get to know the Council members.

Dr. Mayer indicated that there had been considerable discussion recently about the Missouri Institute of Psychiatry. Correspondence regarding experimentation on humans was sent to Dr. Harold Robb, Governor Bond and Congressman James Symington. Congressman Symington has asked the FDA to look into matters relating to human experimentation.

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Dr. Mayer indicated that he, personally, would be supportive of an increase of dues and that he did not want to see the loss or decrease of loan funds for medical students. We would be decreasing loans at a time when there is increasing needs.

REPORT OF DIRECTOR OF DIVISION OF HEALTH

Dr. Domke stated that the Board of Health had been asked to prepare a brochure on recommended immunization procedures.

Dr. Domke stated that he would like to talk about the ambulance situation. The ambulance regulation law does not become effective until July 1, 1974. The funeral directors in Missouri are going out of the ambulance business. At this time, half of the state is now covered by substitute ambulance services. There is a statewide concern regarding this matter. In rural areas particularly, perhaps there could be a hospital-based ambulance service. In metropolitan areas, there are private ambulance services. Dr. Domke reported that since the ambulance district law has gone into effect, some 20 districts have been voted in around the state. It is the basic policy to make ambulance service a local responsibility. Dr. Domke stated that there is a great deal of interest and concern about this problem, but that it would have to be resolved locally. He reported that the ambulance bill calls for ambulance, training and equipment to meet American College of Surgeons standards.

AMA REPORT

Mr. Mortenson reported on several items. On national legislation, he indicated that the Keogh Plan change should be satisfactory to everyone involved. The PSRO National Council has indicated that there will be a state and local option plan. Mr. Mortenson stated that he had talked with the sponsor of the House HMO bill and that it looks like there will be an HMO bill coming out of the House. He said that, hopefully, this bill can be amended satisfactorily. The bill will be an experimental, limited HMO bill.

The dates selected for the Leadership Training Seminar sponsored by the MSMA are February 23-24, 1974.

Mr. Mortenson stated that the AMA had not as yet received the MSMA request for a survey. He reported that the St. Louis City and St. Louis County Medical Societies' surveys have been made.

Mr. Mortenson reported that he is sending a memo to all state and county societies in his area setting forth the new decisions the AMA House of Delegates made on membership.

COMMITTEE OF ARRANGEMENTS

Dr. Chandler appointed the following committee on arrangements for the 116th Annual Session: Dr. Chandler, Chairman; Drs. Bradshaw and Martin.

The Council Chairman commended Dr. Cope for the lovely party held the evening before and on his lovely family.

HCF AND PSRO

Dr. Benoit indicated that the HCF has problems and is in a state of flux. He gave a brief rundown regarding the SEMO foundation and its relationship with UNIMED. The HCF Board has met with UNIMED representatives who assist in setting up and initially operating health care foundations similar to the Denver Foundation for Medical Care. It was the Board's feeling that the UNIMED approach is good. The Board has elected to permit the Executive Committee to work out some arrangement with UNIMED. In dealing with all the various problems implied in PSRO, he said you must develop a flexible plan so you can move in any direction that may become feasible. The AMA has strongly urged HEW to allow state option on statewide PSRO designations. The National Advisory Council of PSRO has taken a positive position in their recommendation to Secretary Weinberger that statewide PSROs be allowed in those states where it appears feasible.

As UNIMED viewed it, the best thing to do was take HCF's original structure and with the five review areas, develop them more autonomously in line with the recent changes in the Bylaws, to structure it so that each area could, if necessary, be identified as a separate PSRO and the current HCF could become the coordinator. The Board felt this was an appropriate approach and if, indeed, the Secretary of HEW was willing to sign a single contract within the State, the HCF would be eligible for such a contracting arrangement, with the subcontracts to each of the five individual areas and HCF as the coordinator.

Dr. Benoit expressed his feeling that a position of unanimity of thought and ability to be heard when contract time rolls around would be better if we have a single contracting agency within the State such as the HCF. He feels it would be better if HEW dealt only with one office rather than dealing with different areas of the state at different times and possibly setting double and triple standards.

Dr. Benoit then reported on the hearing on PSRO held in Jefferson City on August 27. Each of the major physician organizations in the state—MSMA, MAOPS and the HCF—and a spokesman from areas approximating each of the five HCF peer review regions of the state presented proposals with some degree of unanimity. Dr. Benoit said he would not discuss further the SEMO Foundation proposal since he understood that Dr. Hansbrough had covered that. The HCF proposal included the option to have the secretary sign a unilateral contract with just the HCF for PSRO activities within the state, but also indicated its willingness to be the coordinating agency if the secretary chose to make contractural arrangements with different portions of the state. HCF shifted a few counties into different peer review areas. This was done to accommodate physicians in a given county who expressed where they wanted to be located. Physicians in both Wyandotte and Johnson Counties in Kansas, who do much of their hospital work in Kansas City, Missouri, have indicated to their spokesmen they want to be a part of Kansas's PSRO activities rather than Missouri's.

Dr. Benoit stated that as this thing with PSRO evolves, it is possible there might not be a HCFM. This would be detrimental to the physicians and the patients in the state if it happens. What we want to do in peer review is still needed as it was back in 1969 when the HCF was born, is totally defensible and would be to the benefit of all concerned. If we are forced to carry it out under a governmentally structured situation, now identified as PSRO which is going to completely identify itself with cost curtailment and in no way consider the benefits of the patient or the physician's ability to take care of that patient, then we are in very serious trouble and it is the one trap we have to be careful not to fall into.

Dr. Benoit then indicated some of the things going on at the AMA level. The AMA Advisory Committee on PSRO established and organized in January. Four full committee meetings have been held. Dr. Benoit chairs the task force concerned with geographical distribution. The most active task forces have to do with data collection and proper handling. They are extremely concerned with the possibility that all confidentiality of the patient-physician relationships could be lost. If this data handling can be done by coding so that some degree of anonymity is preserved, this is one thing we are striving for. The Task Force on Regulations has developed an initial draft of regulations which are broad and leave room for local modification.

The Task Force Committee on Guidelines and Norms attempted to develop broad guidelines and norms of diagnosis and treatment which will be only a guideline to local PSROs.

It was indicated that Dr. Bauer had resigned, and Dr. Benoit discussed some of the possibilities for his replacement. Senator Bennett is considering introducing an emergency amendment in Congress proposing that the PSRO legislation be entirely administered by SSA.

HR 1 now includes the extension of Medicare beneficiaries to everybody under treatment of chronic instage renal disease. The National Kidney Foundation was called on to draw up proposed regulations for its implementation. Many nephrologists voiced their dissatisfaction to virtually all of their proposals. Dr. Benoit became involved in a special committee of AMA to handle this problem. This Committee feels there is no need to set up a separate review system and that pay for a chronic renal problem should not be any different than for a diabetic, cardiac, etc. One of the proposed regulations has to do with the structure under which certification of centers would be achieved. You would have to have done 25 transplants in the past year to be eligible. Three agencies—AMA, ASIM and a group known as physicians for renal replacement—presented a position paper to HEW through Dr. Edward's office proposing certain basic concepts as follows: (1) No reason for reimbursement other than by traditional methods; (2) Review should be done starting with as local an area as possible; (3) Certain criteria should be developed by people in nephrology which would indicate as least the minimum for an acceptable facility to carry out renal dialysis. Another item which AMA felt strong about is that there should be inducement to patients to go on home dialysis.

The Council on Medical Service has considered a number of AMA resolutions regarding confidentiality. There are certain areas in which it has become common practice for insurance companies to come in and photograph patient records. They have a blanket consent.

The insurance commissioner in Pennsylvania about 1½ years ago came out with 39 proposed guidelines which he proposed should be incorporated into any contract drawn up between Blue Cross plan and any hospital in Pennsylvania. This list now numbers 67 and they are something. This was brought to the AMA's attention, which in turn gave it to three committees of the Council for study and recommendation. Dr. Benoit indicated that he would say 50 of these items are in violation of what most physicians consider good medical principles.

Dr. Benoit then spoke on a program presently under day in Wisconsin on a pilot basis—the Wisconsin Health Maintenance Program. A very knowledgeable man from the NABSP office went over this with the AMA Council on Medical Service. He thinks it combines the best of what physicians want in PSRO and what certain governmental people want in HMO.

Discussion followed regarding Dr. Benoit's presenta-

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tion. The question was raised as to whether by one piece of legislation, namely HR 1, have we gotten ourselves in a position of being forced to change the structure of organized medicine. Dr. Hetlage expressed concern that these various foundations being set up in the state would encompass the whole practice of medicine and the local, state and ultimately the national medical societies will be bypassed. If one company would set up several foundations in the state, this company could render itself extremely powerful.

Dr. Benoit stated that he did not feel this was a threat. Dr. Hansbrough stated that representatives of UNIMED went to every hospital in his district and from the beginning organized medicine was informed. UNIMED is interested in organization and not operation.

Dr. Benoit pointed out that physicians at the level of the Board of Trustees of AMA and the Council on Medical Services are beginning to feel that the UCR concept is in serious jeopardy.

Dr. Peterson indicated that everyone must remember that a health care delivery system and a PSRO are not the same thing. One is a health care delivery system and the other is a regulatory arm of the federal government.

The Chairman thanked Dr. Benoit for an excellent report.

REPORT ON CHP

Dr. Robert Kelley stated that he felt it is about time that the Council be informed about what is going on in CHP in Missouri. He stated that, basically, one of the questions that requires resolving at this point in time is what attitude does the Council of MSMA and the individual members take toward CHP. Dr. Kelley stated that several attitudes had been expressed personally to him by physicians from around the state.

Dr. Kelley stated that he had gotten into CHP by reason of MSMA's suggestion to Governor Hearnes that he should be on the Governor's Advisory Council for CHP. He reported that during the two years he has been Chairman of the Governor's Advisory Council, the Council has been reorganized and there has been considerable change in the composition of the Council. He indicated that hopefully, through the Legislature, the Governor's Advisory Council will be given some statutory authority and thus, be put on a little firmer ground. The Governor's Advisory Council is made up of 51% consumers and is appointed by the Governor. It is a governing board. All policy decisions are made by the Council and implemented by the staff. He indicated that there had been implications that the authority for CHP lies chiefly in the hands of the Director of CHP and that he would like to dispel this idea. He reported that CHP would continue, as in the past, where the Advisory Council controls major policy decisions.

Dr. Kelley stated that the problem in Missouri has been (1) Inadequate funding. CHP has not been able to establish all the area agencies that it should. Eighty-five percent of the population is now in CHP local areas, but there are large geographical areas that are not covered; (2) A salary schedule that is below the national average; and (3) As a result of the salary schedule, they have difficulty in recruiting staff.

The basic premise of CHP is that the original planning should come from the local community. Problems have occurred throughout the state in getting people to cooperate within the local area. A lot of people feel that it is impossible to get a group of consumers and providers of health to cooperate as desired.

Dr. Kelley stated that, at the state level, regardless of the fact that people have different interests and different ideas of what the health system should be, it had been his experience that if you get reasonably intelligent people together and sit down and work things out, you really can achieve results. The results are somewhat meager at times, but there is some progress. If people say this is impossible at the local, regional and state level, then there is going to be federal planning. Dr. Kelley expressed a personal concern for the apathy and disinterest expressed by physicians in CHP activities.

Dr. Kelley stated that CHP had developed a task force to investigate the accessibility of health services. The group held a meeting and asked both providers and consumers what they thought the major defects were in people getting health care. One of the major defects that became apparent was the lack of any plan for emergency medical services in the state. A conference on emergency medical services was held and a state plan was developed. A state center for health statistics is being developed. It will be a center where you can go for definite information about physician distribution, dentist distribution, nursing homes, hospitals, etc.

Dr. Kelley reported that so many things were being placed in the CHP office that they may not be able to accomplish their primary purpose which is long-range planning. One of the things that has come up this year is certification of need legislation.

Dr. Kelley stated that it is difficult to get a physician interested in CHP and attend meetings. There has been concern expressed over the fact that 51% consumers were required in the A and B agencies and the task forces. It was felt that there would be lay domination of all these areas. Dr. Kelley stated that providers are listened to and physician's influence greater than numerical representation. Dr. Kelley expressed concern on what position organized medicine will take in regard to CHP.

He stated that the composition of the present Council is good. There is now better representation of practicing M.D.s and D.O.s on the Council. A dentist has been added to the Council and the consumer representation also is good.

Dr. Hetlage stated that apathy is a problem. He suggested that before the next Council meeting, a list be made of the positive things the B agencies had done throughout the state for health care. He indicated that in his area, the B agency had been mainly involved in facility review. Dr. Kelley stated that Dr. Hetlage was right in that the area agencies have been bogged down in facility review and have not taken the opportunity to get involved in actual basic health planning. He stated that he hoped to send to each member of the MSMA Council a copy of the current composition of the Governor's Advisory Council and a copy of the task force reports that have been accumulated. Dr. Kelley said that this year a task force is in the process of organization which would be involved in home health care.

A question was asked as to whether there would be conflict between the proposed PSRO regions and the CHP boundaries. Dr. Kelley stated that the Governor's Advisory Council had not taken a position on PSRO areas. It had been suggested that the Advisory Council take over this job, but Dr. Kelley stated that this would be inappropriate because the Council is made up of 51% consumers. PSRO is involved in peer review and consumers should not be involved in peer review.

Mr. McIntyre mentioned that Dr. Kelley had stated that the subject of certificate of need legislation might come up in the state legislature and asked how this might conflict with the federal law which more or less has to do with certificate of need legislation. Dr. Kelley stated that the federal law is limited to those institutions which participated in Medicare and Medicaid. The state law, if passed, would cover any institution. Dr. Peterson asked how CHP is coming on such a state plan. Dr. Kelley stated that the CHP does not have a state plan and that one would have to be developed step by step.

REPORT OF COMMISSION ON PUBLIC AFFAIRS

Dr. Bowles acknowledged with deep regret the death of Dr. Arthur Neilson. He stated that Dr. Neilson will be missed on the Commission. Dr. Bowles said that Dr. James Denninghoff of Columbia will replace Dr. Neilson in the area of occupational health on the Commission.

Dr. Bowles stated that because of the failure to attract a good attendance, he wondered if the Public Affairs Conference is accomplishing the purpose for which it is intended. The Commission recommends that for at least one year, the emphasis of the conference be shifted to MMPAC and that it be called an "MMPAC Workshop." The Commission further recommends that the "MMPAC Workshop" be held on the first weekend in February, 1974 and that Dr. Hubert Ritter be asked to serve as Chairman for the Workshop.

A motion to accept and approve this portion of the report was made by Dr. Martin. The motion was seconded by Dr. Hetlage and carried.

Dr. Bowles stated that the Commission recommends that the Auxiliary Public Affairs Breakfast at the Annual Session be continued for 1974, but that MMPAC funds not be used to support the breakfast. Mr. McIntyre stated that he had contacted Mrs. Willman, President of the Auxiliary, about a speaker for the breakfast. The AMA has designated Dr. John M. Chenault as the Board representative to attend the 1974 MSMA Annual Session. Mrs. Willman will invite Dr. Chenault to be the speaker for the Public Affairs Breakfast.

Dr. Bowles stated the Commission recommends continued support of Regional Medical Program projects. He said that RMP has been funded through June 30, 1974.

Dr. Bowles indicated that the Commission commends those local component medical societies who are sponsoring medical aspects of sports meetings with area coaches. The Commission also recommends wide dissemination of timely news releases of interest to the public on venereal disease, immunizations, donating body organs and others.

A motion to approve the entire report was made, seconded and adopted.

Dr. Hetlage suggested that at the next annual session, a breakfast be held with the Councilors and the Presidents and Secretaries of medical societies for a general discussion of medical society problems. Dr. Hansbrough pointed out that during the annual session, the delegates usually have breakfast with their Councilors to discuss matters. Mr. McIntyre suggested that perhaps this could be done during the Public Affairs Conference in February.

Dr. Martin stated that he needed the names from Councilors of two people, at least one to be a physician, from each Councilor District suggested for the PAC Board. These will be given to the Nominating Committee for consideration. He indicated that they could be sent to Mr. McIntyre for transmittal to the committee.

Dr. Martin stated that he had a suggested resolution to propose:

WHEREAS, The American Medical Association is now in the process of reordering its internal priorities, and,

WHEREAS, The AMA is a federated structure, composed of state and county medical societies and,

WHEREAS, 12 men are now expected to maintain AMA's relations with 435 Congressional Districts, 100 Senatorial Districts, 50 State Medical Associations, 50 State PACs, 50 State Legislatures and over 2,000 county medical societies, and,

WHEREAS, We, the states, and our component county societies expect and need the American Medical Association to provide us with technical expertise which we cannot afford, and,

WHEREAS, We are only as strong as our weakest link, therefore be it

Resolved, That the field offices of the American Medical Association be given a top priority within the "mission" concept to assist the states and counties with more technical expertise, and be it

Resolved, That these Regional Offices be provided with additional staff to provide much needed assistance in the areas of Communication and Promotional Development, Membership and Promotional Development and Legislative Development, all strictly for the help of these 50 component members of this federation of organized medicine.

Dr. Martin moved acceptance of this resolution for further Council study. The motion was seconded by Dr. Bradshaw and carried.

NEXT COUNCIL MEETING

Dr. Chandler reported that the next Council meeting will be held on December 14, 15 and 16 at the Ramada Inn in Jefferson City. The Budget Committee will meet at 1 PM on the 14th and the Council will have an executive-session dinner meeting on Friday night. The meeting was adjourned.

EXECUTIVE SESSION

In Executive Session following the adjournment of the regular Council meeting, the Council considered the following:

The matter of any staff member being designated as an executive officer for any specialty groups in the state was discussed. After considerable discussion, the following motion was made, seconded and unanimously adopted: "No member of the staff of MSMA is to serve as an executive officer for any specialty group, insurance group, foundation or other segment of organized medicine."

The second item discussed was a request to the AMA to provide a survey team to look at the Missouri State Medical Association. The Chairman pointed out that in such a letter of request, we need to specify certain items which we would like the survey team to study and advise upon. We believe that this survey team can assist us in evaluating our present activities and operation and can give us suggestions which will be helpful in planning the future of our Association. The following items were agreed upon for the AMA survey team to consider: review and advise us as to needed changes in our Constitution and Bylaws; our community relations or, better stated, public relations; our communications' efforts; our executive staff organization and activity; and our financial status and budget control.

Mr. McIntyre was directed to write a letter to the AMA requesting a survey based upon these stated items.

The third item was presented by Dr. Chandler who reported that he is quite sold on a policy manual of the Illinois State Medical Society which sets forth in printed form the existing official opinions, policies and practices of the Illinois State Medical Society which may be used as reference documents by officers and spokesmen for the Medical Society as well as for information of the membership.

Dr. Chandler proposed that a similar policy manual be drafted by MSMA and kept current, so it will be available to all those needing its contents. It also was recommended that this idea of a policy manual for the MSMA be referred for consideration and further recommendation by the Committee on Planning of MSMA.

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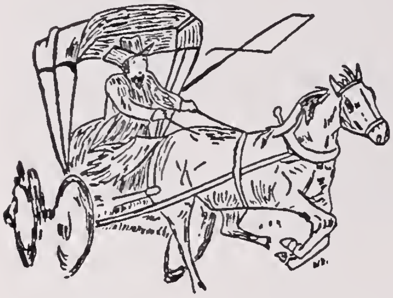

FORTY YEARS AGO

The 100th anniversary of the publication of William Beaumont's "Experiments and Observations on the Gastric Juice and the Physiology of Digestion" was celebrated by the St. Louis Medical Society on November 21, Dr. Beaumont's 148th birthday anniversary. The program consisted of "Biographical Sketch of William Beaumont" by Dr. Major G. Seelig; "William Beaumont's Experiments and Their Present Day Value" by Dr. Joseph Erlanger; "Dr. Beaumont as a St. Louisian" by Dr. Robert E. Schlueter; and "Our Civic and Medical Debt to Beaumont" by Dr. Louis H. Behrens.

The Bates County Medical Society met at the Courthouse in Butler on November 16 with President R. E. Crabtree of Butler presiding. Members present were Drs. C. W. Luter, C. A. Lusk and G. A. Delameter, Butler; H. A. Rhodes, Foster; J. M. Smith, Amoret; E. E. Robinson, Adrian; and R. H. Smith, Rich Hill. Visitors were Drs. C. C. Conover and John Deweese of Kansas City. Officers elected were Dr. G. A. Delameter, President, and Dr. R. H. Smith, Secretary-Treasurer. It was temporarily agreed that the Society should meet every two months, alternating with Vernon-Cedar County Medical Society. This would make it possible for all to attend a meeting each month.

TWENTY-FIVE YEARS AGO

One hundred and twenty-five physicians of Northwest Missouri and Eastern Kansas gathered in Excelsior Springs on November 4 for a clinical conference sponsored by the Clay County Medical Society. Afternoon and evening meetings were held at the Elms Hotel. The one-day meeting opened with a 12:15 PM round-table luncheon at which Dr. E. C. Robichaux of Excelsior Springs presided.

The Missouri Medical Service was organized in St. Louis in April, 1945 to provide for payment of certain general surgical services, medical and other diagnostic procedures. At the end of the first year, a total of 29,153 persons were enrolled. The participants are limited to employed groups of people covered under the Blue Cross Plan and their dependents. The Blue Cross Hospital Service Plan was inaugurated in Kansas City in 1938 through the untiring efforts of members of the medical profession.

Hugh G. Hamilton, M.D., Kansas City, was elected secretary of the Section on Obstetrics of the Southern Medical Association recently.

A scholarship in public health is being established in honor of the late Joseph F. Bredeck, M.D., St. Louis.—Dr. David E. Musgrave assumed the office of mayor of Excelsior Springs on October 11.

TEN YEARS AGO

It was noted in this "Forty Years Ago" column that "The Nobel prize in medicine for 1923 has been awarded to Drs. H. G. Banting and J. T. R. Macleod of Toronto for their discovery of insulin."

Dr. Hugh V. Ashley, Jr. of Cape Girardeau, one of 44 thirty-second degree Masons, was selected for the rank of Knight Commander of the Court of Honor.

Wendell G. Scott, M.D., St. Louis, was named president of the American Cancer Society at a meeting of the Board of Directors on October 25.

Dr. Thomas H. Burford of St. Louis was among the surgeons who took part in operations televised at the meeting of the American College of Surgeons in San Francisco.

On Thursday, September 12, the Greene County Medical Society held its 16th Annual Handicap Golf Tournament at Hickory Hills Country Club in Springfield. Dr. M. D. Bonebrake took top honors in this year's tournament with a net score of 66. Dr. Bonebrake obtained temporary possession of the new Championship Traveling Trophy and, also, an electric eye Polaroid camera.

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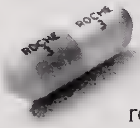
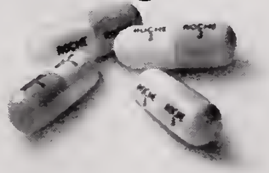
How strong must a tranquilizer be for severe anxiety?

As strong as Librium® 25 mg
(chlordiazepoxide HCl)



The achievement of desired therapeutic results is often a function of the dosage *strength* as well as the drug's intrinsic action. Thus, when anxiety is *severe*, the 25-mg strength of Librium frequently provides the necessary antianxiety action with a minimum of unwanted adverse reactions. Librium 25 mg is a convenient dosage form for the relief of severe, incapacitating anxiety, specifically formulated to supplement your counsel and reassurance.

Benefits-to-risks ratio permits higher dosage



For over 13 years, Librium has been recognized for its excellent benefits-to-risks ratio, an asset in the *higher* dosage ranges as in more common clinical applications. Thus, the frequency of dosage with Librium 25 mg can be flexibly adjusted to the needs and response of the individual patient, up to 100 mg daily if required. Total daily dosage for the elderly and debilitated should not exceed 20 mg. When severe anxiety has been reduced, Librium dosage should be correspondingly reduced or discontinued entirely.

basic support in severe anxiety
Librium® 25 mg
(chlordiazepoxide HCl)
1 capsule t.i.d./q.i.d.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc
Nutley, N J 07110

Before prescribing, please
plete product information, a sur
which follows:

Indications: Relief of anxie
occurring alone or accompanying
states.

Contraindications: Patients
hypersensitivity to the drug.

Warnings: Caution patients
combined effects with alcohol and
depressants. As with all CNS-actin
patients against hazardous occupat
complete mental alertness (*e.g.*, op
ery, driving). Though physical anc
dependence have rarely been repor
mended doses, use caution in admi
addiction-prone individuals or thc
increase dosage; withdrawal symp
convulsions), following discontinu
drug and similar to those seen witl
have been reported. Use of any dru
lactation, or in women of childbea
that its potential benefits be weighed against its
possible hazards.

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SAMPLE

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

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